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ABSTRACT

An instructor's manual and student activity guide on livestock management are provided in this set of prevocational education materials which focuses on the vocational area of agriculture. (This set of materials is one of ninety-two prevocational education sets arranged around a cluster of seven vocational offerings: agriculture, home economics, distributive education, health occupations, world of work, trade and industry, and office occupations.) The instructor's guide is organized into the following elements: title of activity, duration of activity (four to eight periods), activity goals, nine instructional objectives, related vocational clusters, and activity implementation (description, materials needed, teacher preparation prior to class, during the class, follow-up activities, answer key to student check point activities and masters for duplication [e.g., student check sheets]). The student activity guide provides step-by-step instructions (narrative and illustrations) for completing each instructional objective (e.g., identify the parts of a dairy cow, identify the wholesale cuts of beef). At the end of each set of instructions is a student check point (evaluation activity). Ten occupational descriptions (e.g., livestock-yard attendant, sheep shearer) conclude the document. (JH)

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AGRICULTURE -- LIVESTOCK MANAGEMENT

Kit No. 61

INSTRUCTOR'S MANUAL

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In Cooperation With

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Clemson University
Clemson, South Carolina 29631

1978

CE 020 535

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TITLE OF ACTIVITY

Kit No. 61, Agriculture – Livestock Management

DURATION

Main Activity: 3 – 5 days
Follow-up Activity: 1 – 3 days

GOALS

Each student will become aware of the terms used in livestock management. The student will identify wholesale and retail cuts of meat from three types of animals. The importance of breeding and desirable physical characteristics will be recognized.

INSTRUCTIONAL OBJECTIVES

Given a check sheet each student will identify the parts of a dairy cow.

Given a check sheet each student will identify the parts of a sheep.

Given a check sheet each student will identify the parts of a hog.

Given a check sheet each student will identify the parts of a beef animal.

Each student will identify the wholesale cuts of beef.

Given visual and written descriptions each student will identify 9 wholesale cuts of pork.

Given proper directions each student will identify the 7 wholesale cuts of lamb.

Each student will identify desirable and undesirable traits of a beef animal.

Given the proper information each student will diagram the inbreedings of animals.

VOCATIONAL CLUSTERS

Agricultural Science
Health Occupations

ACTIVITY IMPLEMENTATION

A. Description

This activity is divided into four sections. Each section will identify some area of livestock management. The activity is a simple introduction to and awaremess of the types of information needed in livestock identification.

B. Safety

No special requirements.

C. Materials Required

1. Audio Visual Equipment
   None
2. Technical Equipment
   None
3. Expendable Materials
   Check Sheets 1 – 9
   Pen or pencil

D. Preparation Prior to Class

Read the Student Activity Guide. Reproduce the check sheets and VIEW Fact Sheet (one sheet is required for each student).

E. During Class Session

Introduce this activity by asking your class how many students ate any type of meat within the last 24 hours.

SAMPLE INTRODUCTION: Like most Americans we consume large quantities of meat each day. The meat served at restaurants, hamburger shops, or in your own home usually has been commercially prepared. All meat is obtained from live animals. Someone must produce animals for each of us to consume. These people are called livestock ranchers. There are many occupations and careers in this vocational area. Upon completion of this activity you may wish to talk with an agriculture teacher (or me -- if you have an agriculture background).

TO THE TEACHER: Pass out the Student Learning Activity Guides and Check Sheet 1. As each student completes each objective, collect the old and issue the next check sheet until all nine objectives are completed.

F. Follow-up Activities

1. Have each student complete a VIEW Fact Sheet.
2. Pass out the animal reproduction sheet. Have a calendar handy and ask students to compute the expected birth date of the animals listed.
3. If possible, visit either a dairy farm or livestock ranch.

ANSWER KEY

Check Sheet I

1. Dewclaw
2. Pastern
3. Teats
4. Udder
5. Flank
6. Mammary veins
7. Knee
8. Brisket
9. Dewlap
10. Shoulder
11. Muzzle
12. Forehead
13. Poll
14. Neck
15. Withers
16. Crops
17. Ribs
18. Barrel
19. Hip
20. Thurl
21. Tail head
22. Pin bones
23. Thigh
24. Stifle
25. Hock
26. Switch

Check Sheet II

1. Hind flank
2. Ribs
3. Fore flank
4. Foreleg
5. Breast
6. Shoulder
7. Face
8. Forehead
9. Neck
10. Top of shoulders
11. Back
12. Loin
13. Rump
14. Dock
15. Thigh
16. Hock
17. Hind leg

Check Sheet III

1. Cheek
2. Jowl
3. Pastern
4. Foreleg
5. Fore flank
6. Belly
7. Side
8. Hind flank
9. Dewclaw
10. Hind leg
11. Ham
12. Tail
13. Rump
14. Loin
15. Back
16. Shoulder
17. Neck
18. Poll
19. Ear
20. Snout

Check Sheet IV

1. Flank
2. Ribs
3. Shank
4. Dewclaw
5. Pastern
6. Knee
7. Forearm
8. Brisket
9. Shoulder
10. Dewlap
11. Muzzle
12. Face
13. Poll
14. Crest
15. Crops

16. Back
17. Loin
18. Hooks
19. Rump
20. Tail head
21. Quarter
22. Hock

Check Sheet V – Beef

1. Brisket
2. Foreshank
3. Chuck
4. Plate
5. Rib
6. Flank
7. Loin
8. Shank
9. Round
10. Rump

Check Sheet VI – Swine

1. Jowl
2. Boston butt
3. Picnic
4. Back
5. Side
6. Loin
7. Rump
8. Ham
9. Shank

Check Sheet VII – Lamb

1. Leg
2. Breast
3. Shoulder
4. Rack
5. Loin
6. Sirloin
7. Foreshank

Check Sheet VIII

A. Desirable
B. Undesirable
C. Undesirable
D. Desirable
E. Desirable
F. Undesirable

Check Sheet IX

William — Cindy
William — Debra
William — Donna

Cindy — John
Cindy — Sammie
Cindy — Marvin

Martha — John
Martha — Sammie
Martha — Marvin

Debra — John
Debra — Sammie
Debra — Marvin

Donna — John
Donna — Sammie
Donna — Marvin

MASTERS FOR DUPLICATION

VIEW Fact Sheet
Check Sheets 1 – 9
Follow-up Sheet II

VIEW FACT SHEET

NAME _____ CLASS _____ OCCUPATION _____

A. List the advantages (good points) of this occupation (job).

B. List the disadvantages (bad points) of this occupation (job).

C. List three things you should know to do this occupation (job).
1.
2.
3.

D. What type of education should you get to be prepared (do) for this occupation (job)?

E. What courses must you take to go into this occupation (job)?

F. What do you think your future in this occupation (job) will be?

G. What wage can you expect in this occupation (job)?

H. What are the working hours of this occupation (job)?

I. To learn more about this occupation (job), write to:

J. Using a scale of 1 to 5, circle the number that measures your interest in this occupation (job) as a possible career.

I don't like it. 1 2 3 4 5 I like it.

CHECK SHEET I

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____
11. _____
12. _____
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19. _____
20. _____
21. _____
22. _____
23. _____
24. _____
25. _____
26. _____

CHECK SHEET II

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____
11. _____
12. _____
13. _____
14. _____
15. _____
16. _____
17. _____

CHECK SHEET III

1. _____
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14. _____
15. _____
16. _____
17. _____
18. _____
19. _____
20. _____

CHECK SHEET IV

1. _____
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3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____
11. _____
12. _____
13. _____
14. _____
15. _____
16. _____
17. _____
18. _____
19. _____
20. _____
21. _____
22. _____

CHECK SHEET V

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____

CHECK SHEET VI

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____

CHECK SHEET VII

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____

CHECK SHEET VIII

A. desirable

undesirable

B. desirable

undesirable

C. desirable

undesirable

D. desirable

undesirable

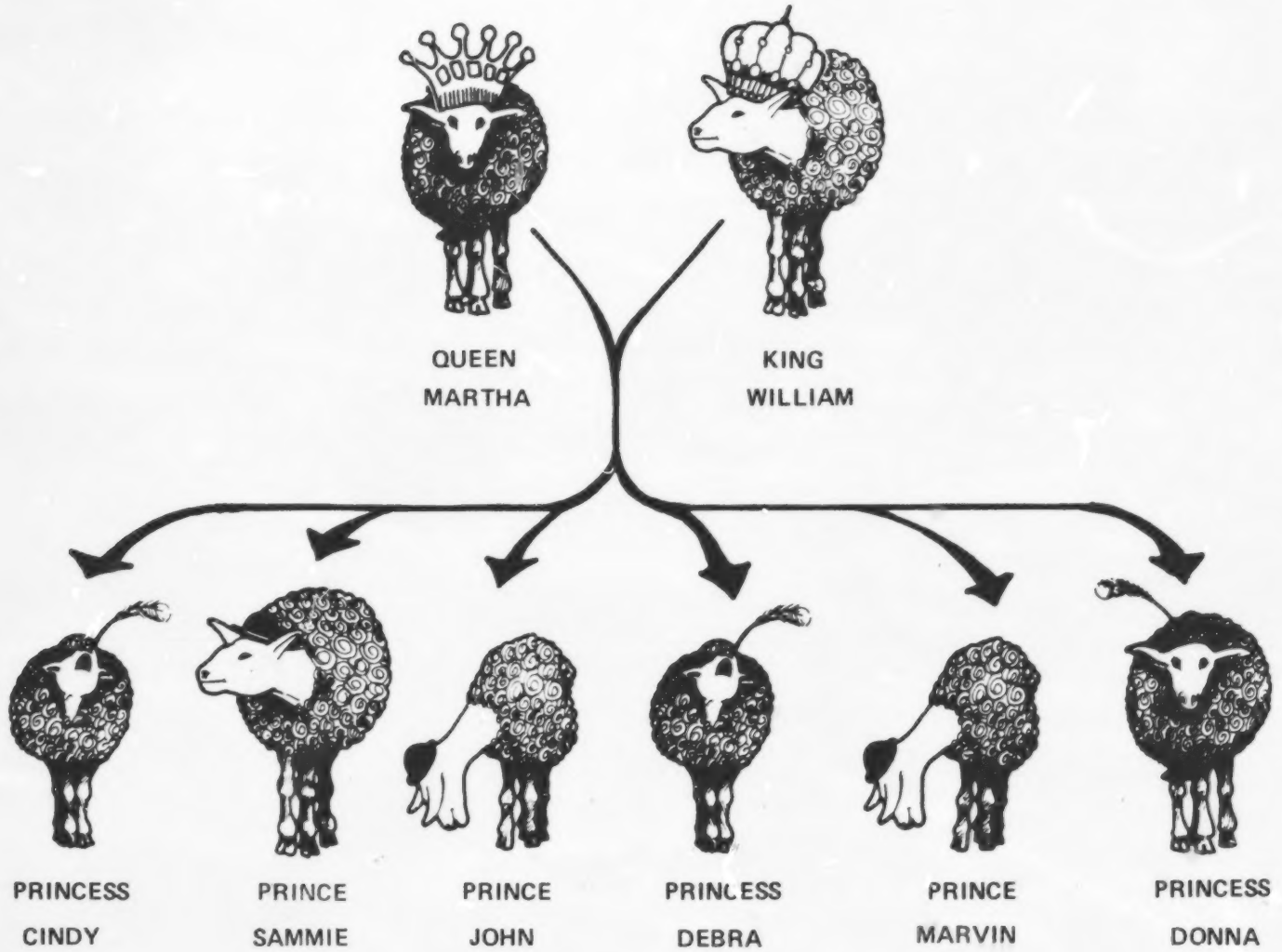
E. desirable

undesirable

F. desirable

undesirable

CHECK SHEET IX



FOLLOW-UP SHEET II

Gestation Periods

OBJECTIVE: Given a date when an animal was bred, the student will calculate the approximate date of birth of the offspring.

STEP 1 – The number of days it takes some animals to have their offspring is:

Horse - 336 days
Cow - 281 days
Goat - 151 days
Hog - 113 days
Cat - 64 days
Dog - 60 days

STEP 2 – A horse was bred on Jan. 11; when will the colt be born?

Jan.	31	Number of days in month bred
Jan.	11	Date horse was bred
Jan.	20	Number of days in month bred that the animal was pregnant
Feb.	28	
Mar.	31	
Apr.	30	
May	31	
June	30	
July	31	
Aug.	31	
Sept.	30	
Oct.	31	
Nov.	30	
	323	Number of days pregnant at the end of November
	336	Days it takes horse to have offspring
	-323	Number of days pregnant at the end of November
Dec.	+13	Colt should be born on this date
	336	

CHECKPOINT

Calculate the date of birth of the offspring if the following animals were bred on these dates:

Horse bred on Sept. 28
Cow bred on June 30
Goat bred on March 20
Hog bred on May 1
Cat bred on Dec. 8
Dog bred on Oct. 18

AGRICULTURE – LIVESTOCK MANAGEMENT

Kit No. 61

STUDENT
LEARNING ACTIVITY GUIDE

Prepared by

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State Department of Education
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1978

INTRODUCTION

This activity is divided into four sections. Each section will identify some area of livestock management. The activity is a simple introduction to and awareness of the types of information needed in livestock identification. Each section has its own introduction. Read all these section introductions before working.

GOALS

Each student will become aware of the terms used in livestock management. The student will identify wholesale and retail cuts of meats from three types of animals. The importance of breeding and desirable physical characteristics will be recognized.

DIRECTIONS

Follow the student guide through all four sections. Read each objective and step in order. Answer every checkpoint completely and return the answer sheet to your instructor.

MATERIAL

Check Sheets 1 – 9
Pen or pencil

PROGRAMMED TEXT

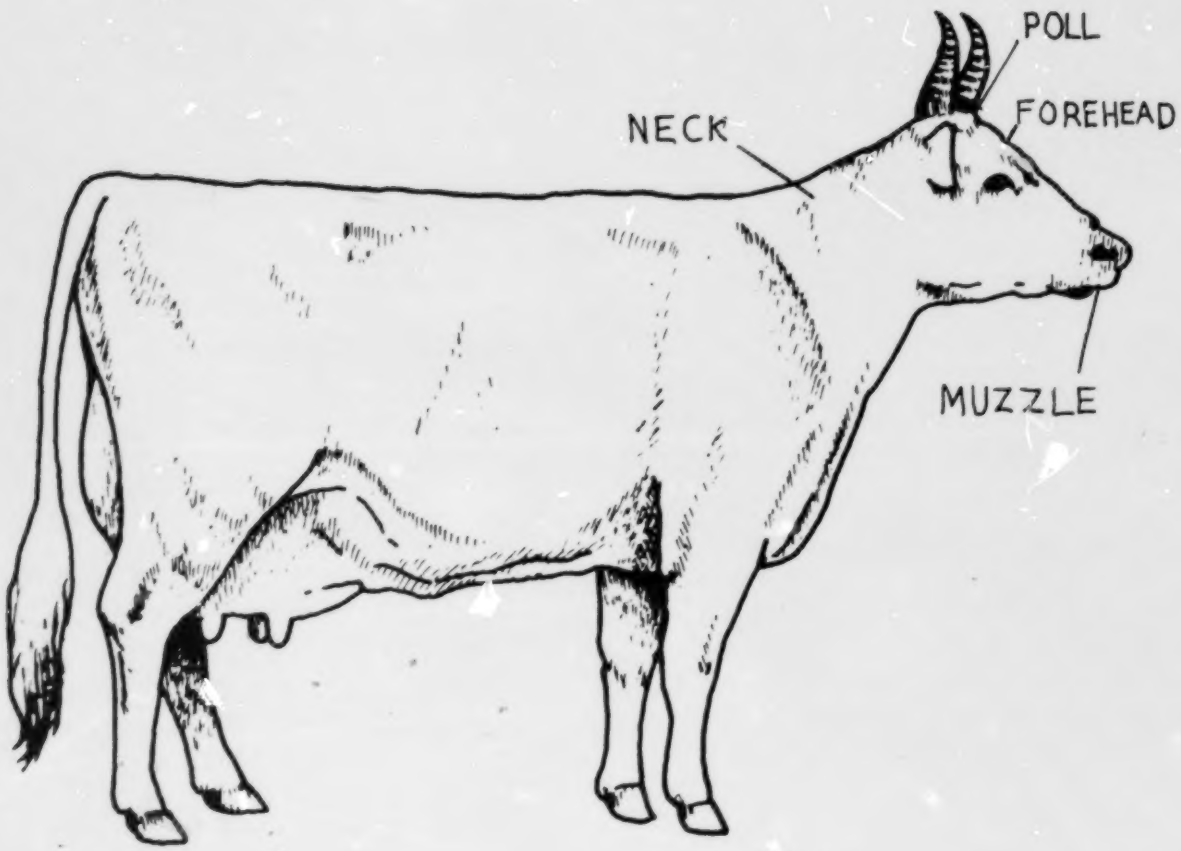
SECTION I – PARTS OF ANIMALS

INTRODUCTION

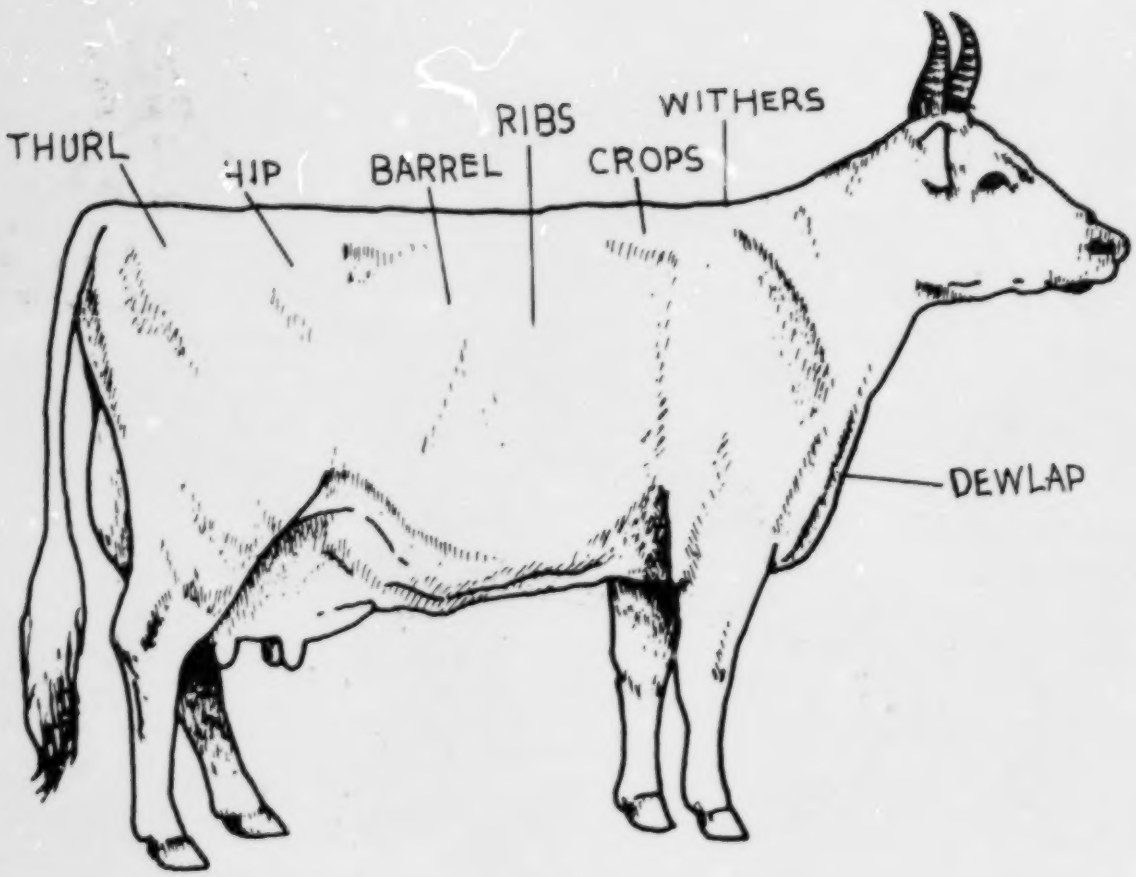
This section will identify the parts of four high production animals. A farmer, depending on the size of farm, geographic location, and capital (money), may choose one of these animals to breed for production. Animals, like people, require food, clean air, water and medical attention. Healthy animals generally produce more desirable grades of meat and improved profits for the farmer.

Instructional Objective 1

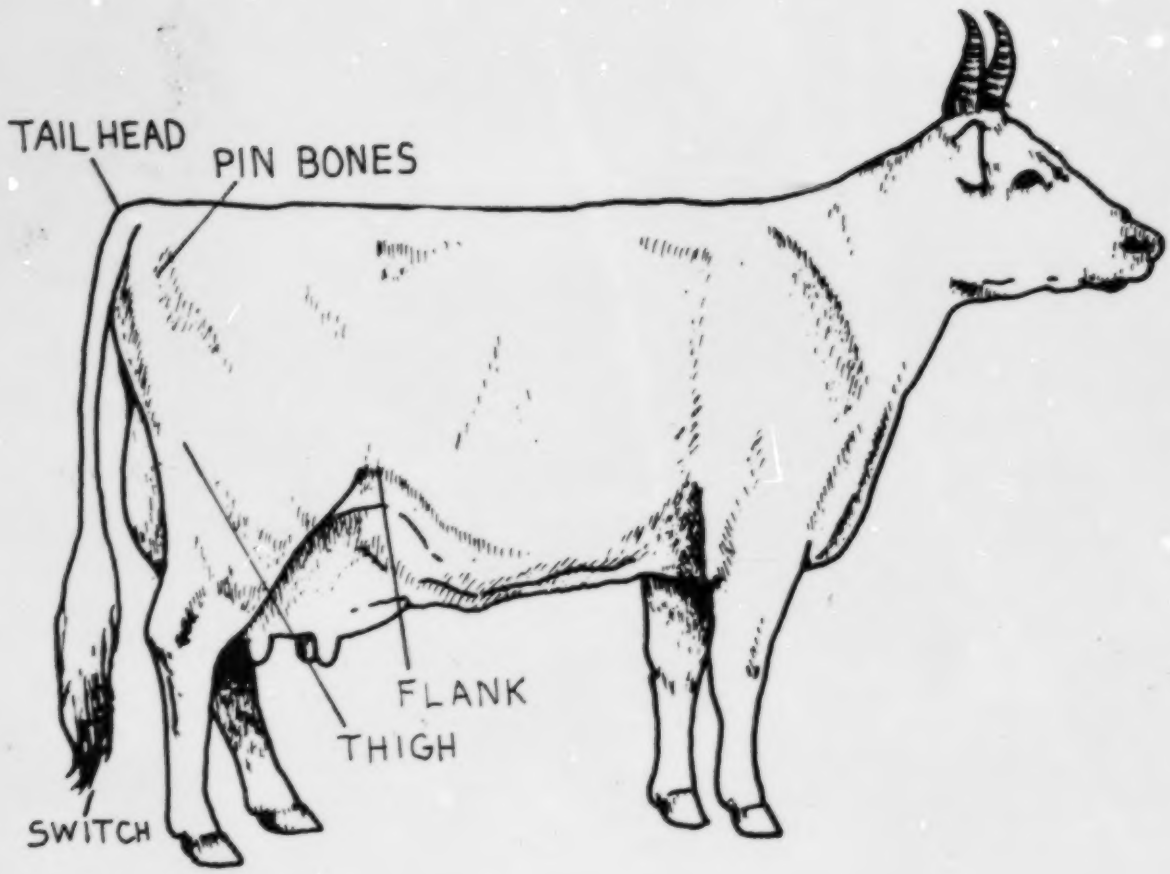
Given a check sheet each student will identify the parts of a dairy cow.



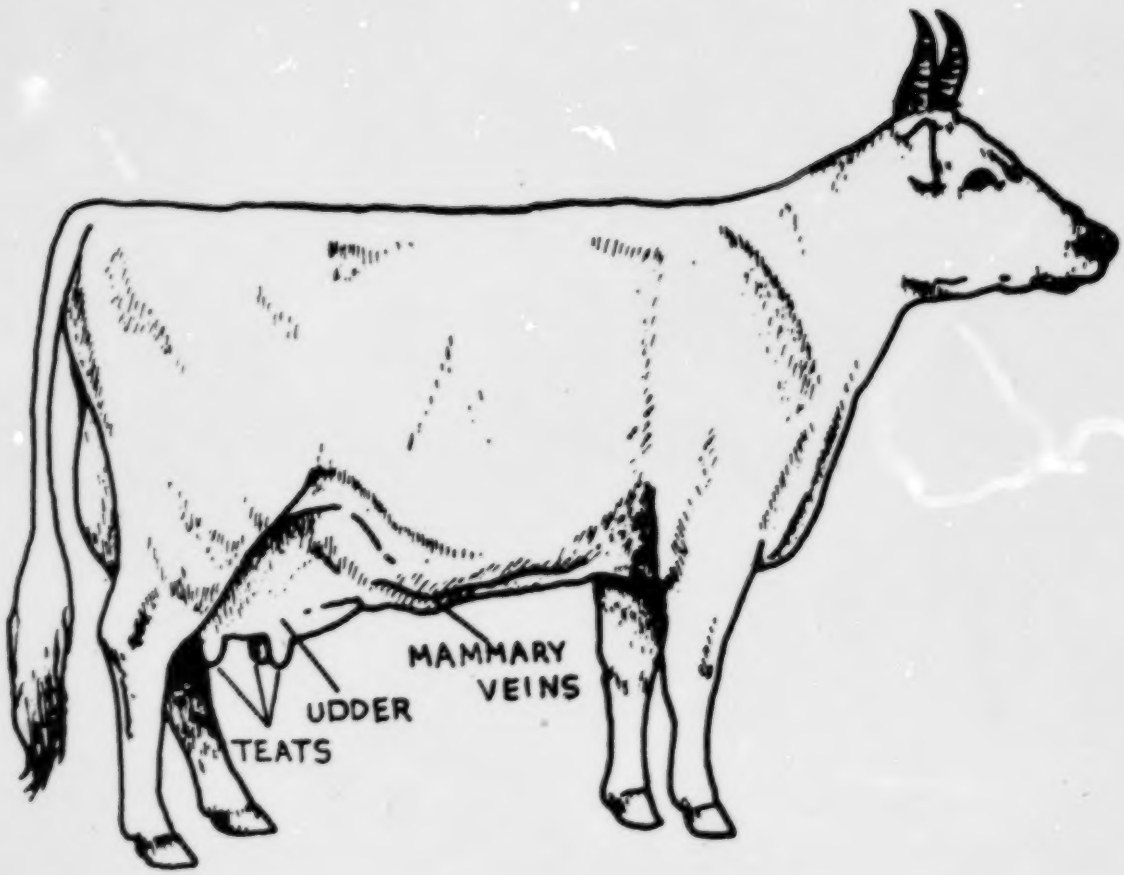
STEP 1 – The parts of a cow's head are: muzzle, forehead, poll and neck.



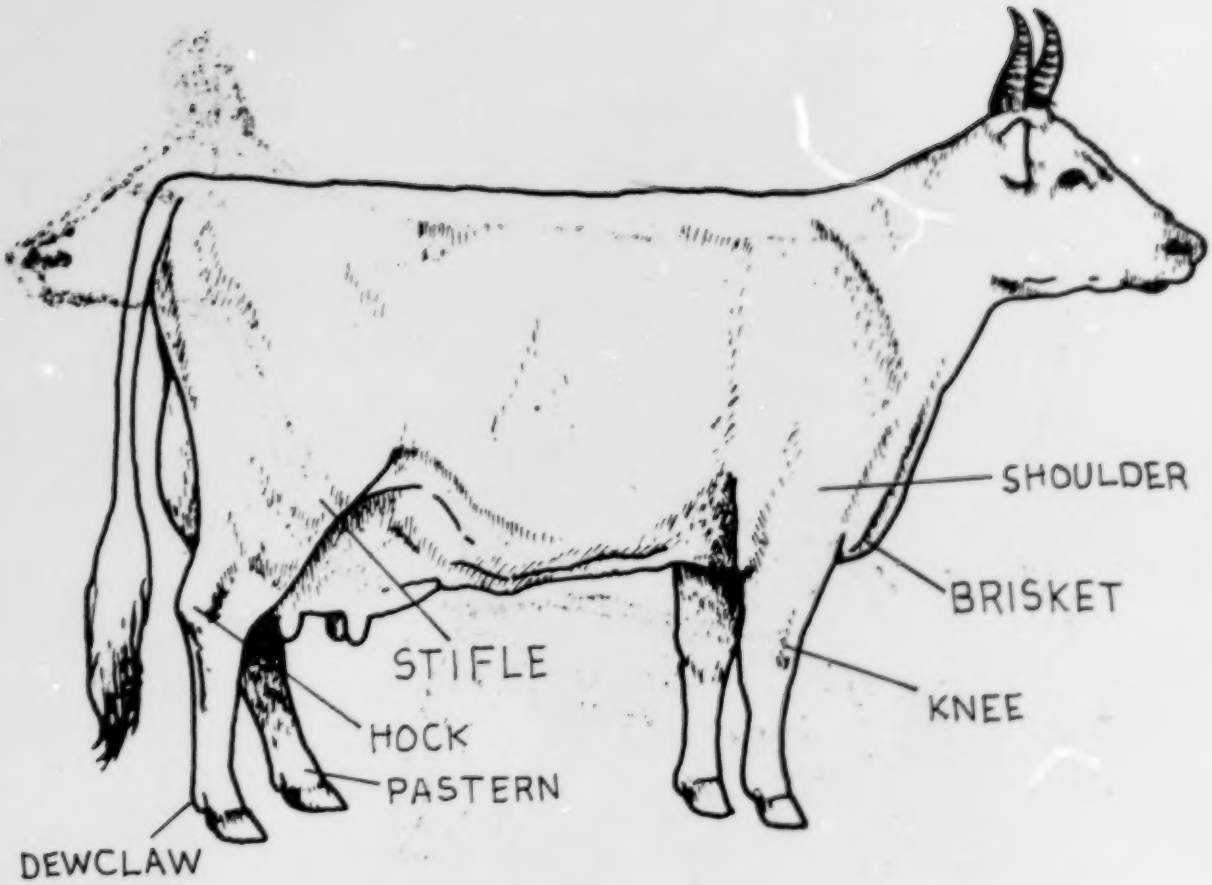
STEP 2 – The parts of a cow's body are: withers, crops, ribs, barrel, hip, thurl, dewlap.



STEP 3 – The parts of a cow's hind end are: tail head, pin bones, thigh, switch and flank.



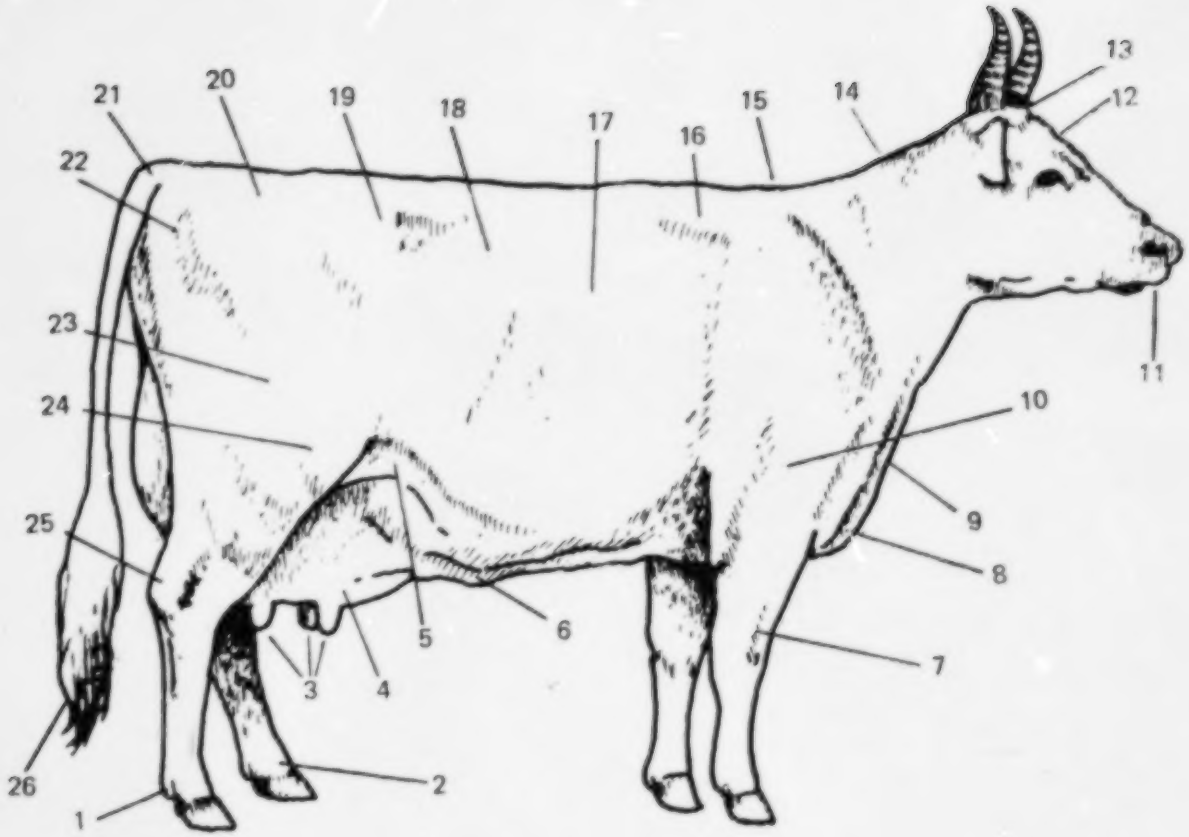
STEP 4 – The parts of the cow which produce milk are: teats, udder and mammary veins.



STEP 5 — The parts of the cow's leg are: stifle, hock, dewclaw, shoulder, pastern, knee and brisket.

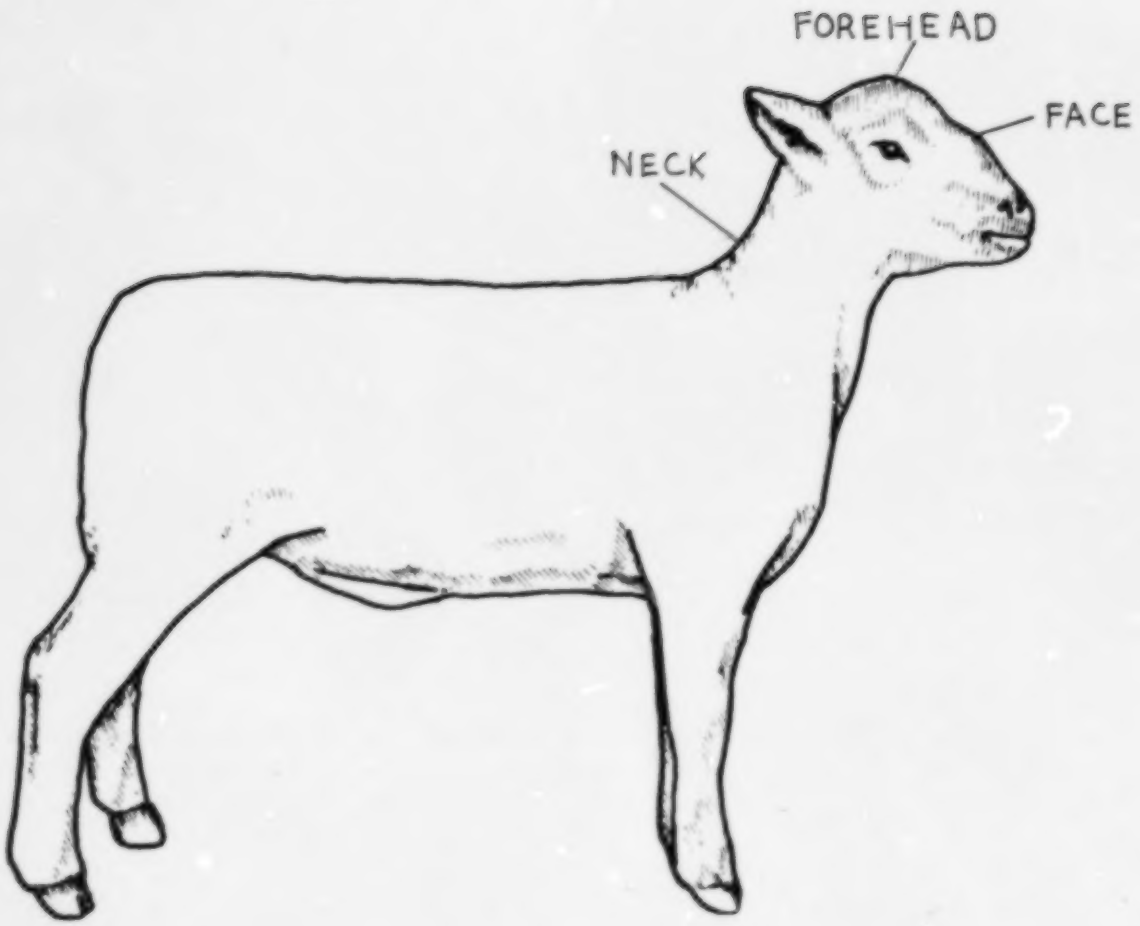
Check Point

Using the following picture identify the various parts of a dairy cow on Check Sheet I.

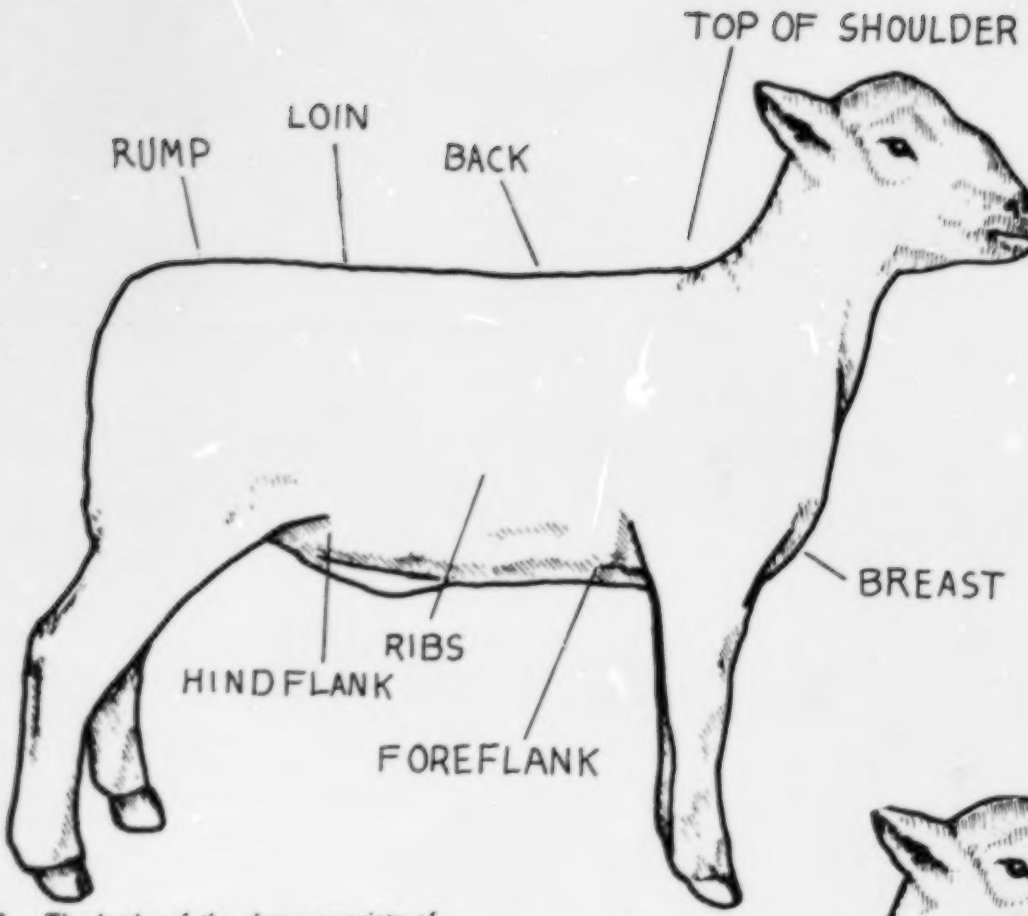


Instructional Objective 11

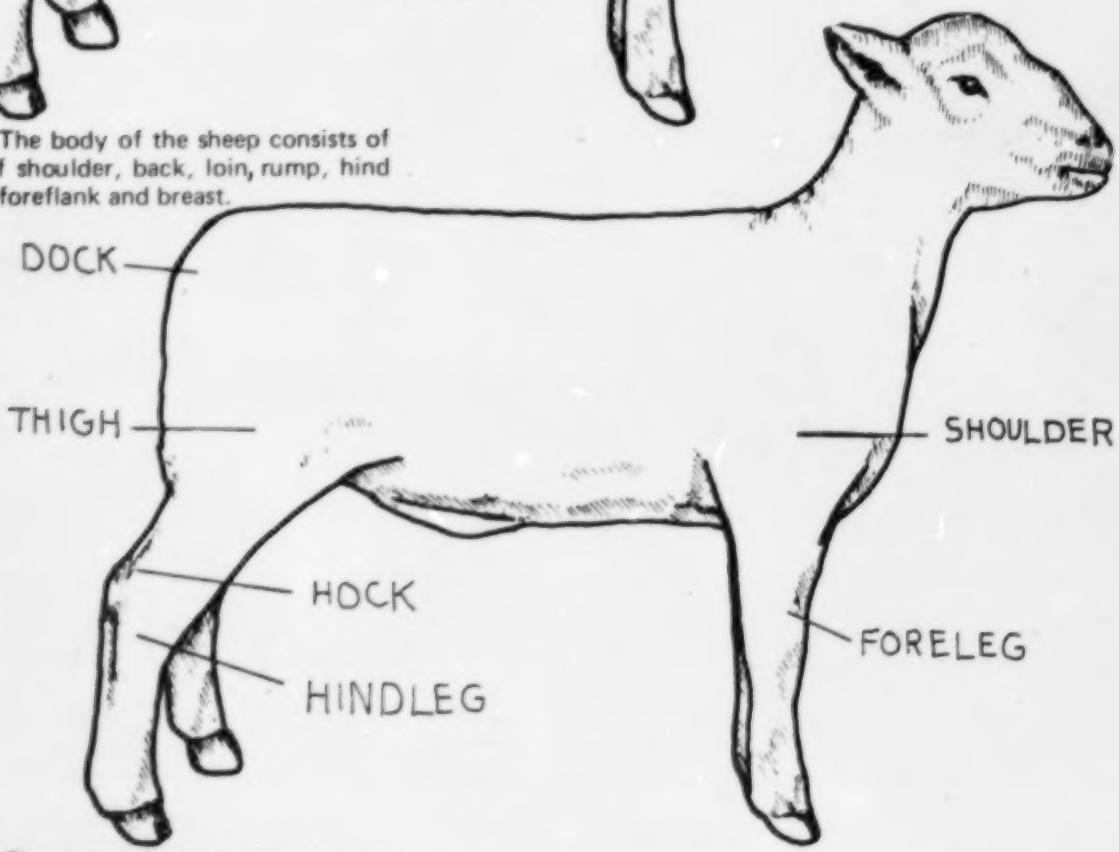
Given a check sheet each student will identify the parts of a sheep.



STEP 1 – The head of a sheep has three main parts: the face, forehead and neck.



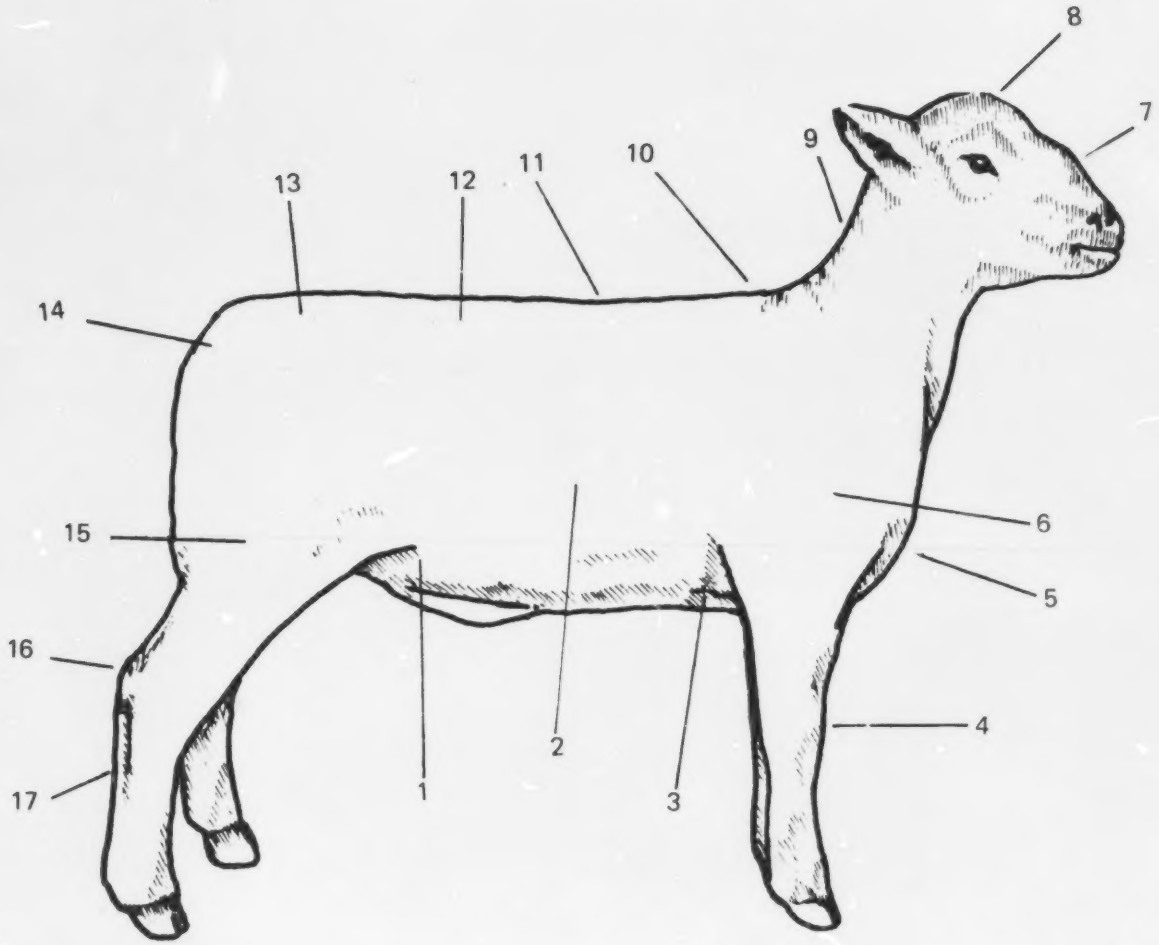
STEP 2 – The body of the sheep consists of the: top of shoulder, back, loin, rump, hind flank, ribs, foreflank and breast.



STEP 3 – The parts of the sheep's legs are the: shoulder, fore leg, hind leg, hock, thigh and dock.

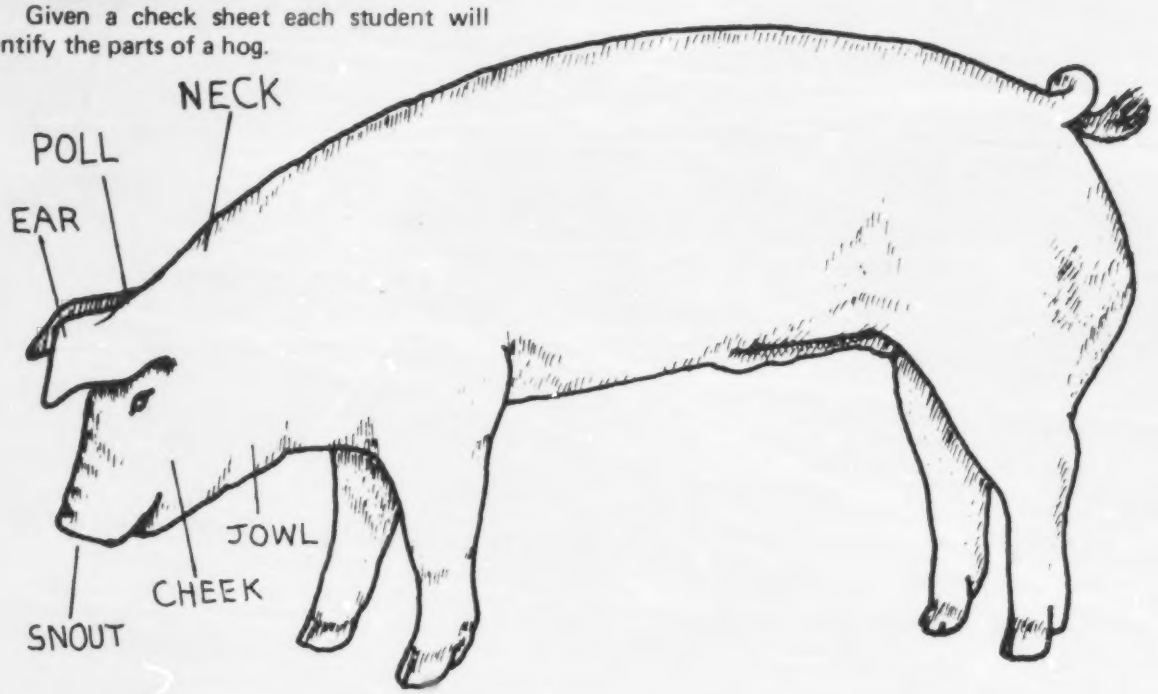
Check Point

Using the illustration provided identify the parts of a sheep on Check Sheet II.

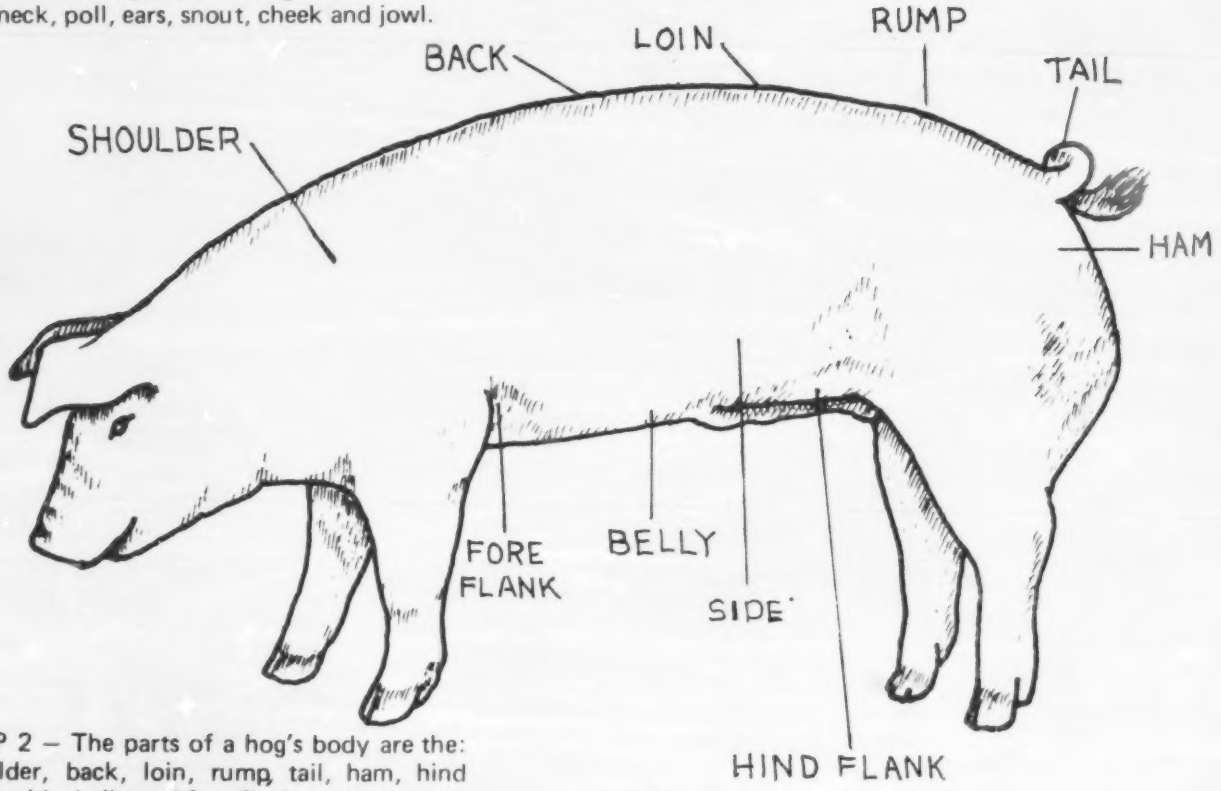


Instructional Objective III

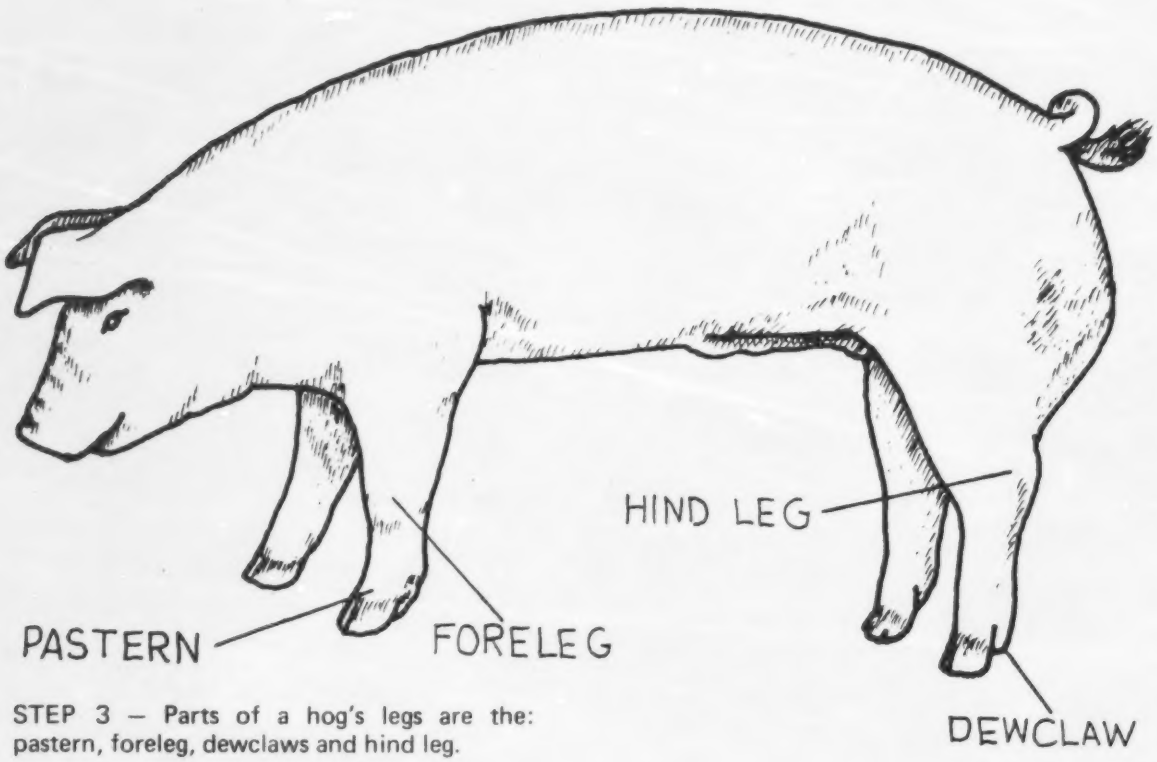
Given a check sheet each student will identify the parts of a hog.



STEP 1 – The parts of a hog's head include the: neck, poll, ears, snout, cheek and jowl.



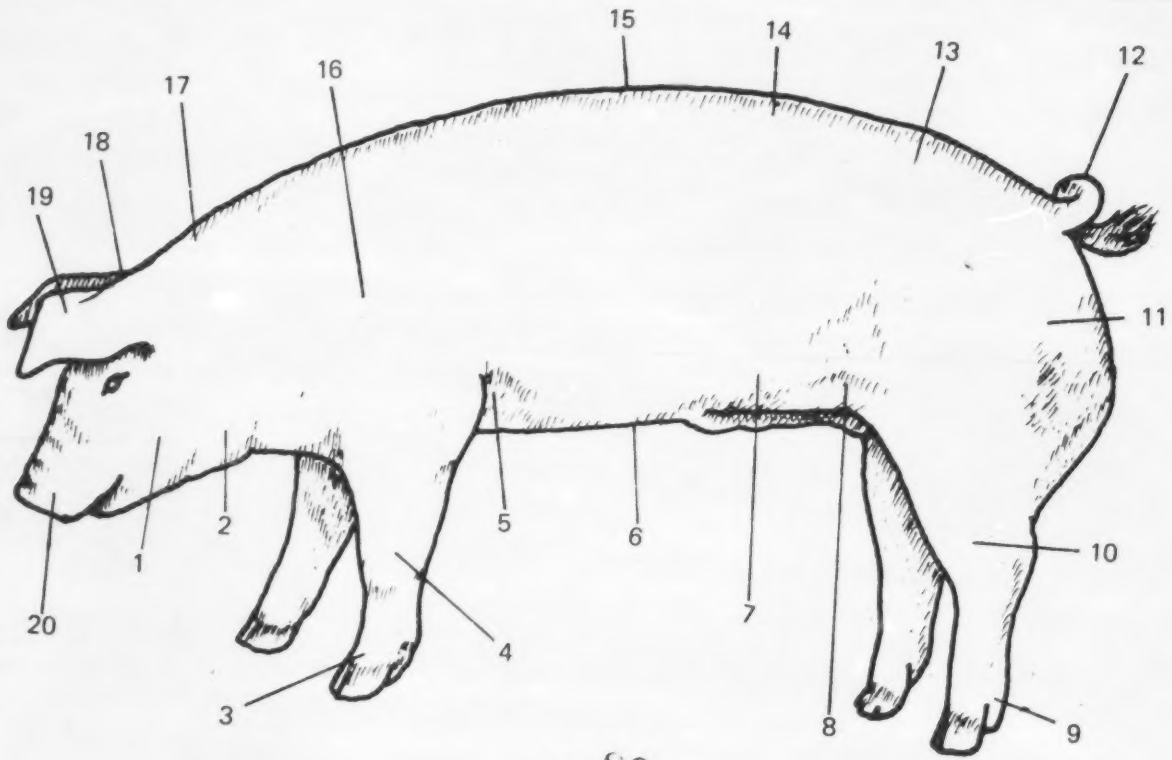
STEP 2 – The parts of a hog's body are the: shoulder, back, loin, rump, tail, ham, hind flank, side, belly and fore flank.



STEP 3 – Parts of a hog's legs are the: pastern, foreleg, dewclaws and hind leg.

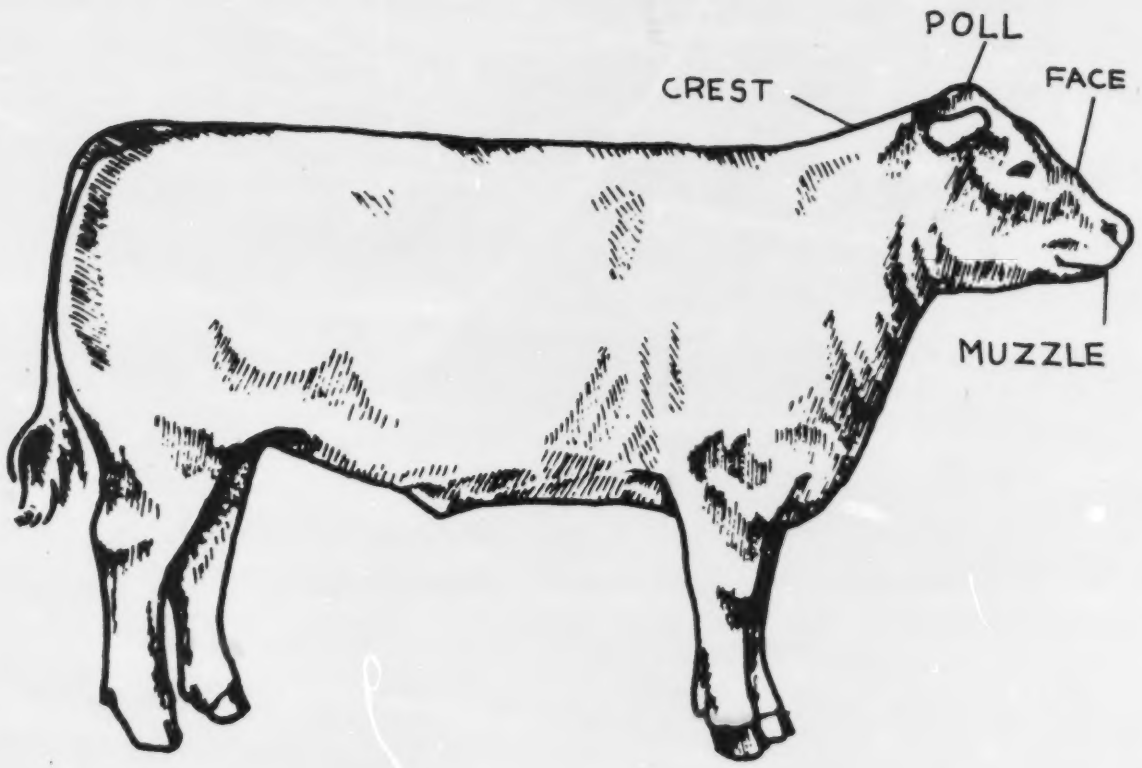
Check Point

Using the illustration provided identify the parts of a hog on Check Sheet III.

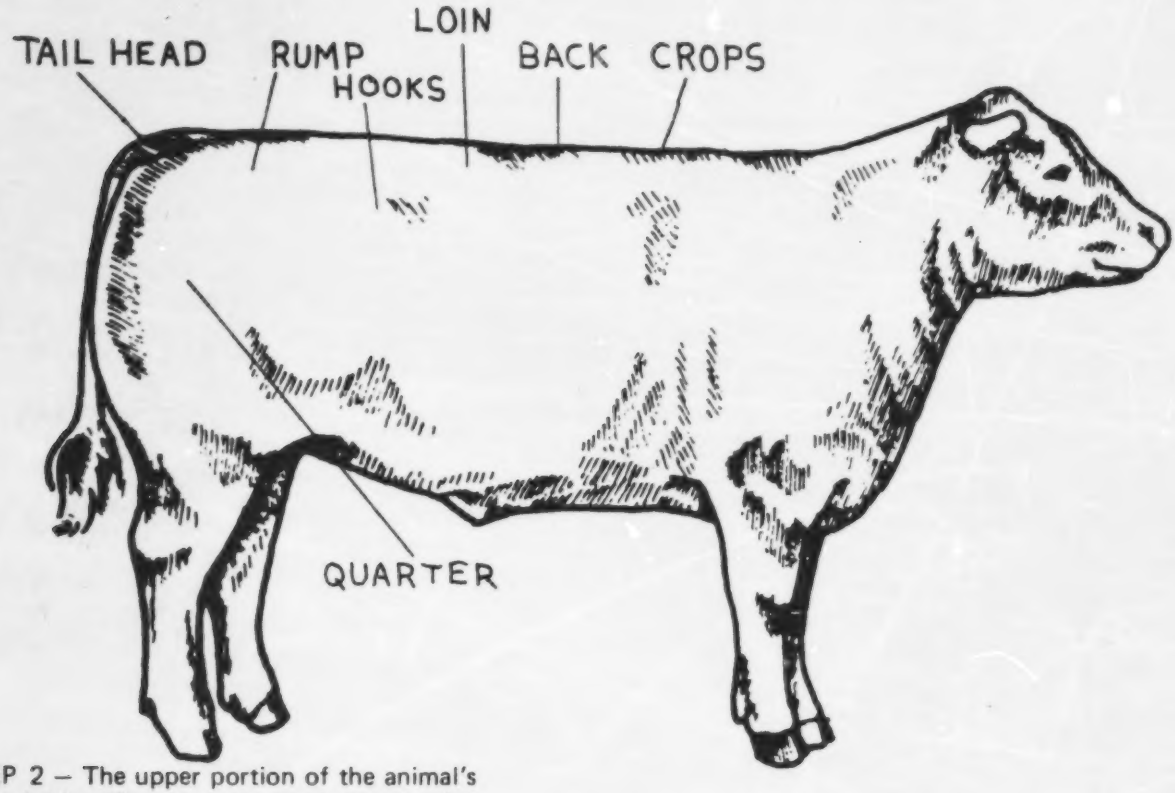


Instructional Objective IV

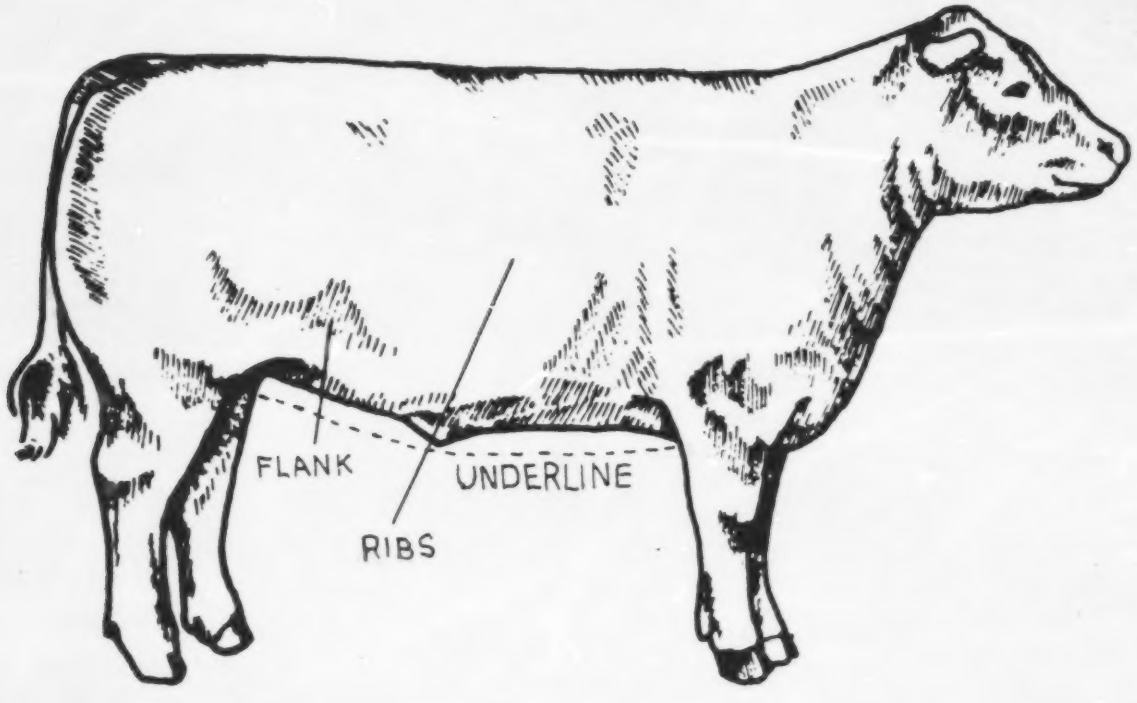
Given a check sheet each student will identify the parts of a beef animal.



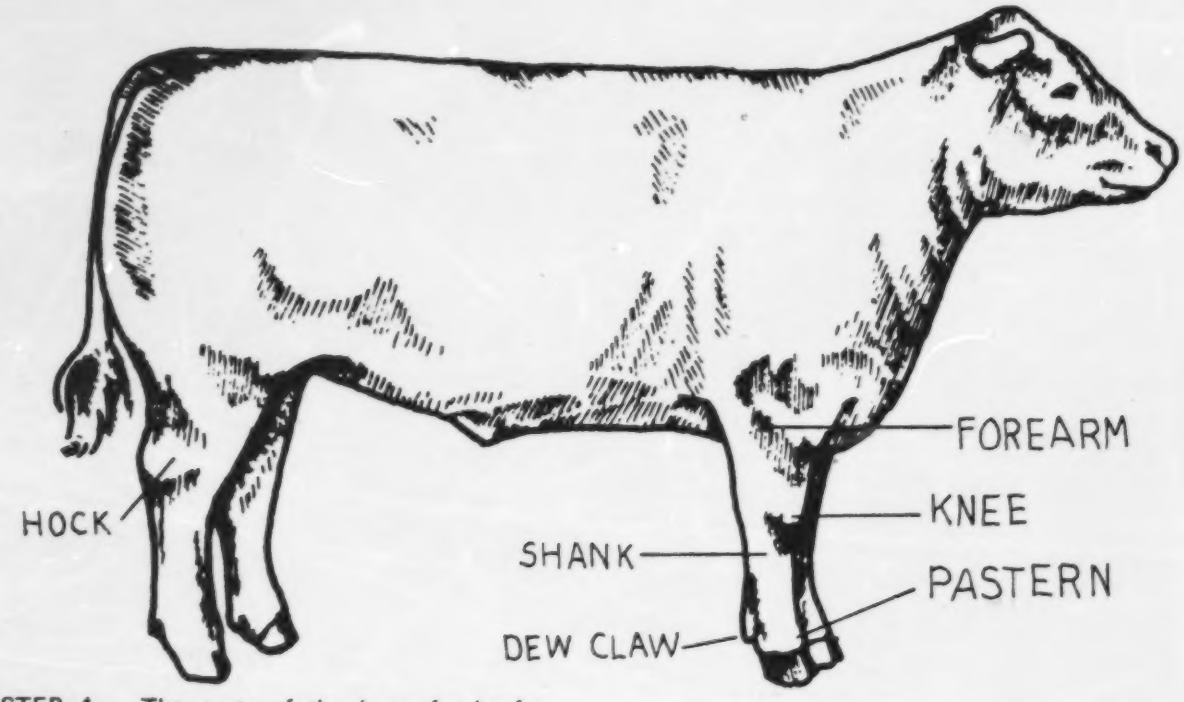
STEP 1 – The head of a beef animal consists of the: muzzle, face, poll and crest.



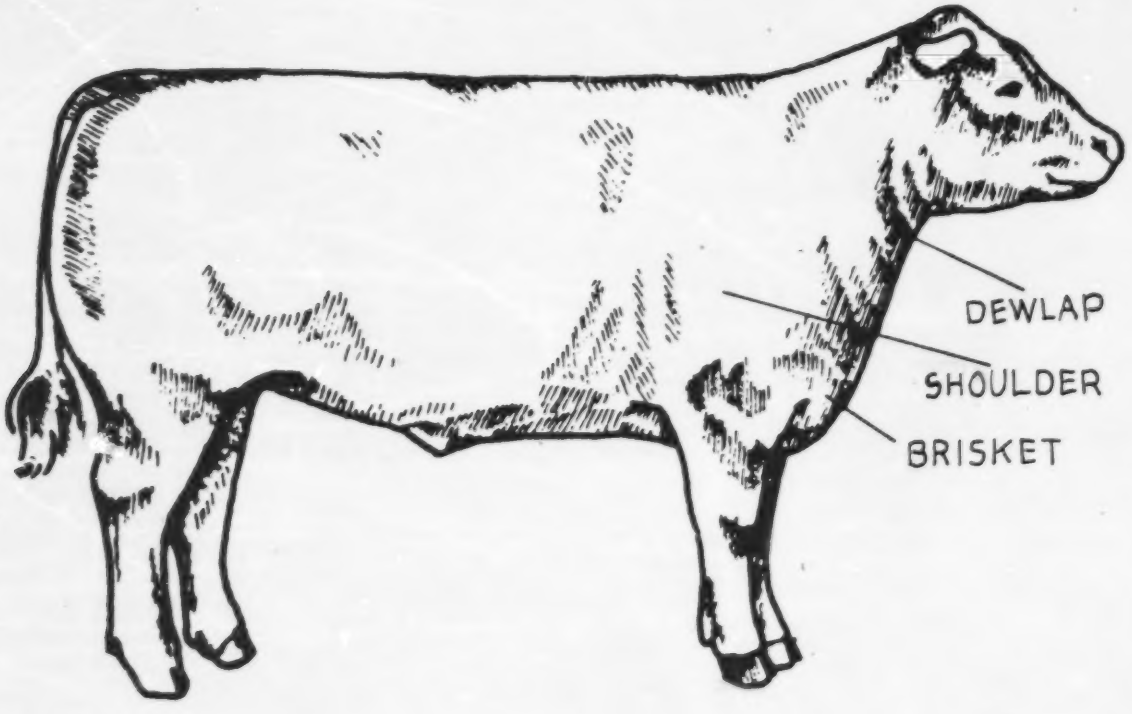
STEP 2 – The upper portion of the animal's body is identified as: crops, back, loin, hooks, rump, tail head and quarter.



STEP 3 – The lower portion of the animal's body is the: flank, ribs and underline.



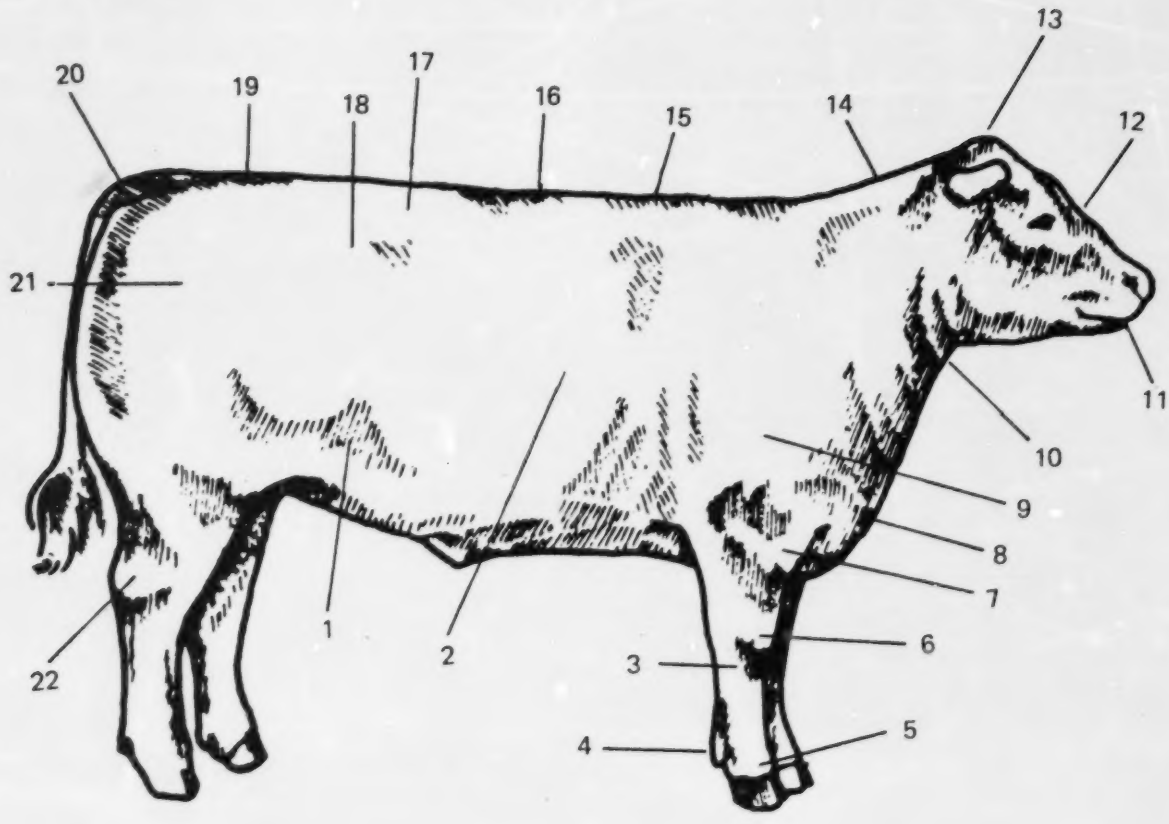
STEP 4 – The parts of the legs of a beef animal are the: forearm, knee, pastern, dewclaw, shank and hock.



STEP 5 – The animal's chest is divided into the dewlap, shoulder and brisket parts.

Check Point

Using the illustration provided identify the various parts of a beef animal on Check Sheet IV.



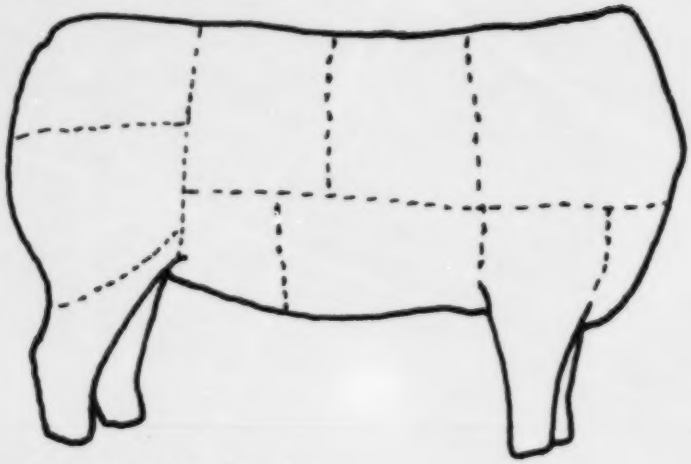
SECTION II – WHOLESALE AND RETAIL CUTS OF MEAT

INTRODUCTION

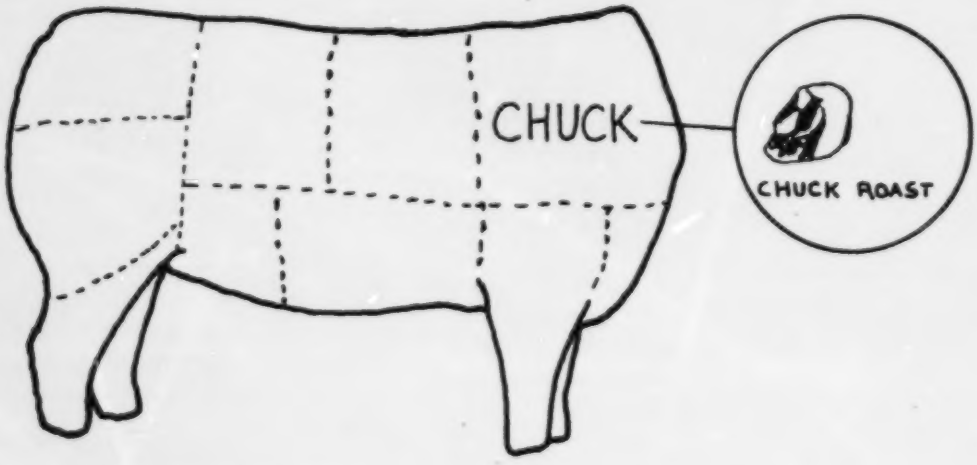
This section will cover the wholesale cuts of various meats. Many farmers breed their animals for larger wholesale weight and lean meaty stock. Each student will be instructed in the cuts of meat that are produced through the butchering process.

Instructional Objective V

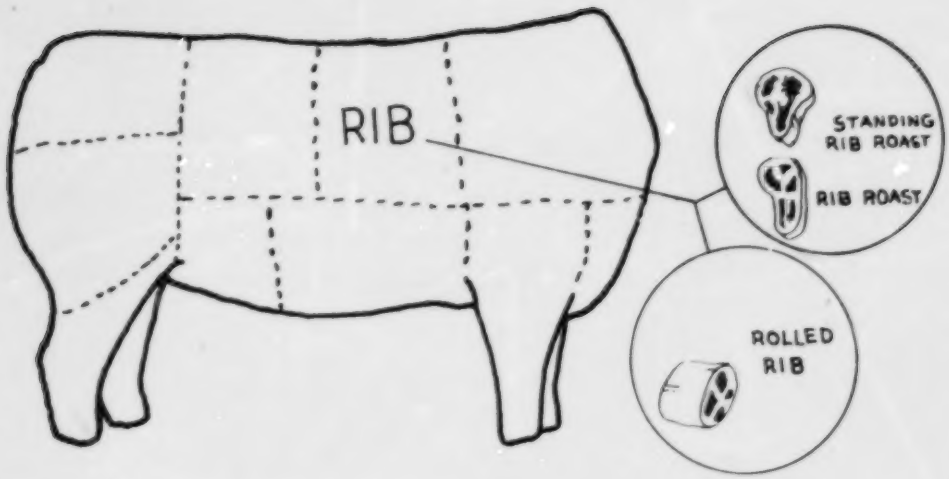
Each student will identify the wholesale cuts of beef.



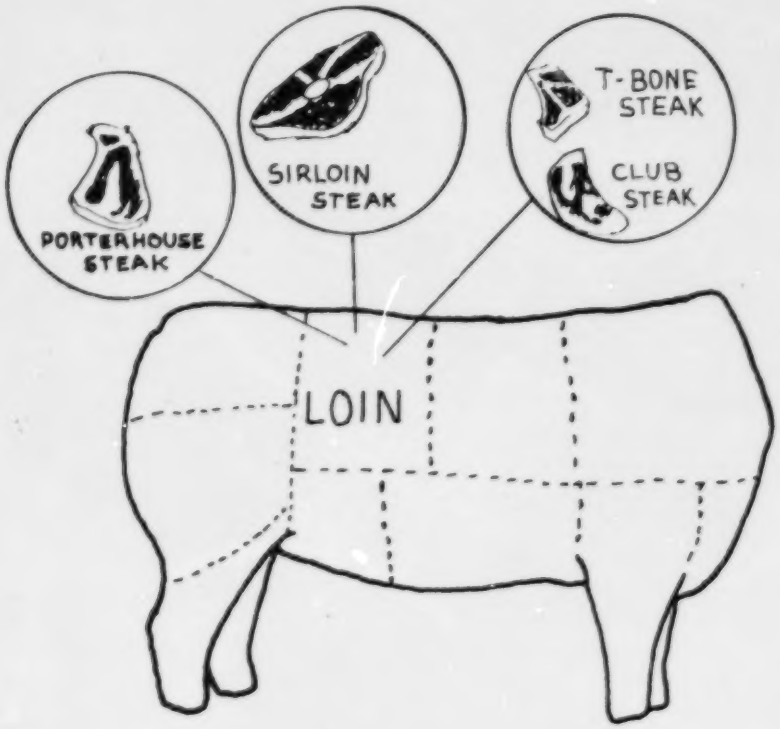
STEP 1 – This is a diagram of a slaughtered beef animal which has 10 parts.



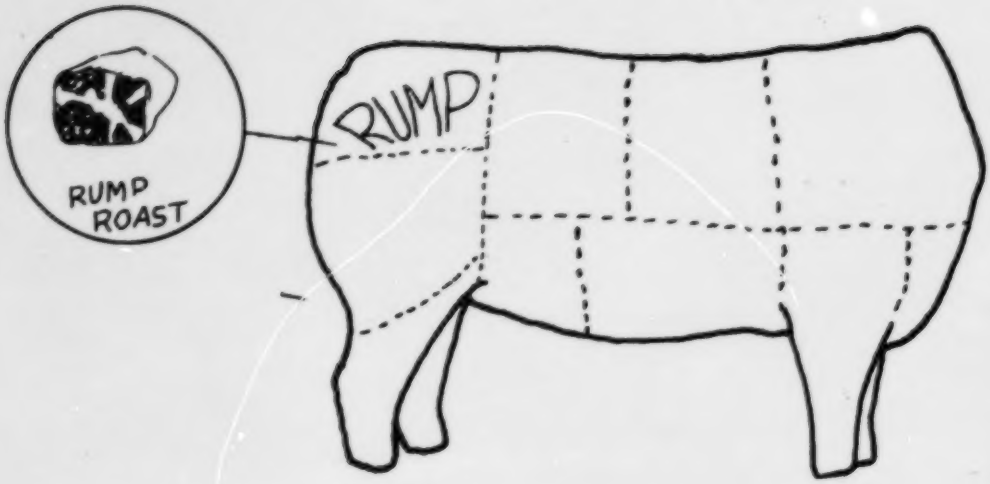
STEP 2 – One section is the chuck. Chuck roast is cut from this portion of cattle.



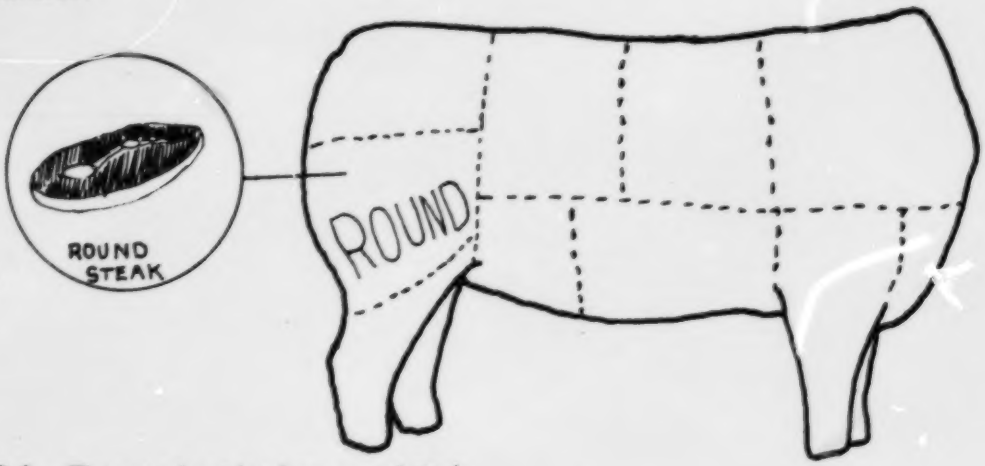
STEP 3 – The rib cut is a popular part of the animal. Meats including rib roast, standing rib roast, and some steaks are produced from this cut.



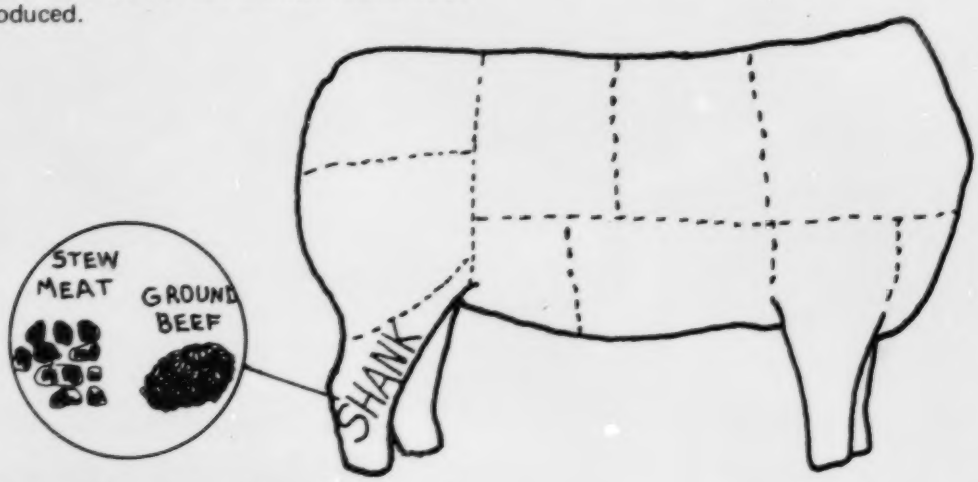
STEP 4 – The loin cuts produce popular meats like sirloin, T bone, club and porterhouse steaks.



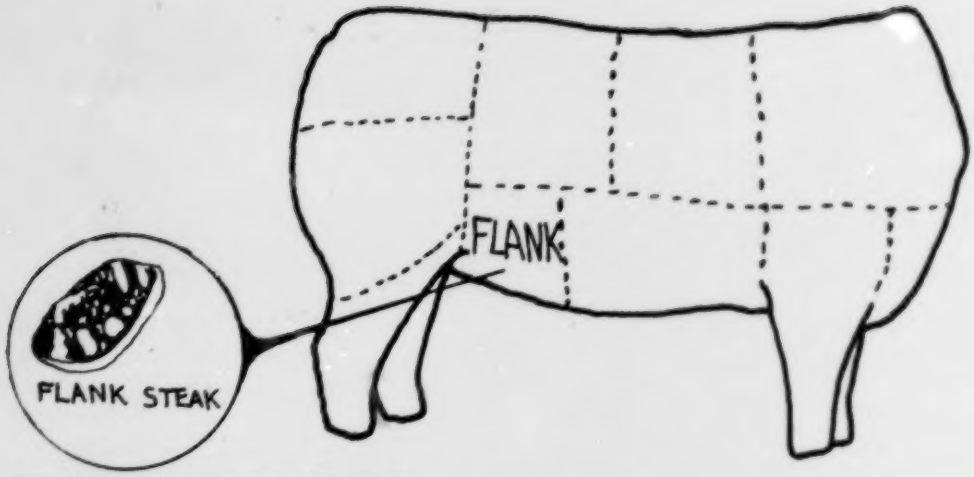
STEP 5 – The rump cut is where rump roast is butchered.



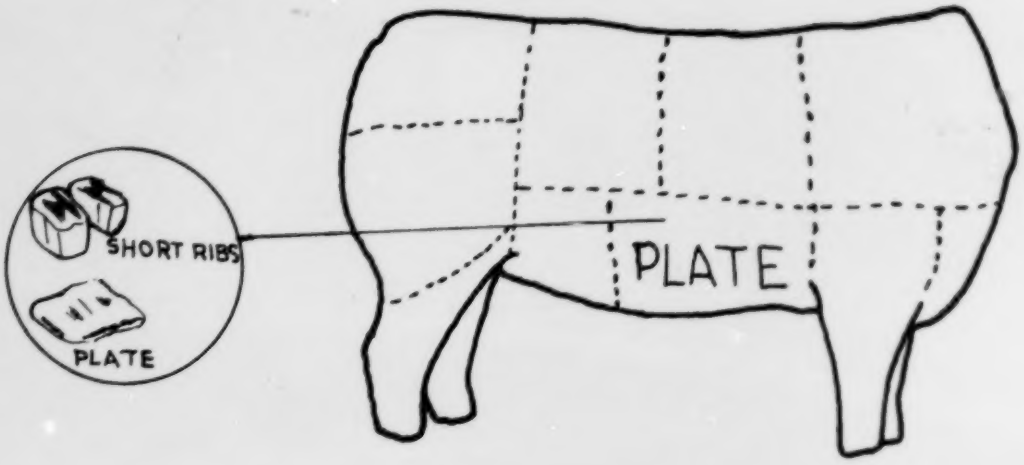
STEP 6 – The round cut is where round steak is produced.



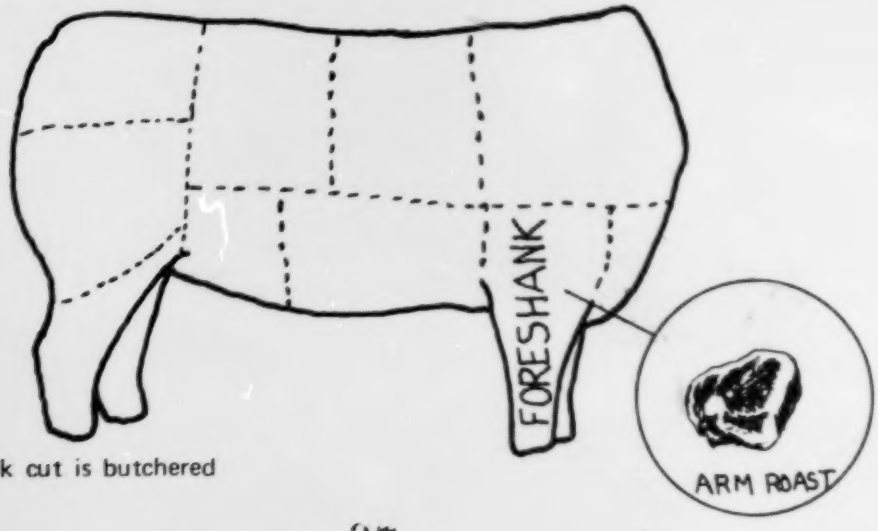
STEP 7 – The shank cut is used to produce meat like ground beef and stew meat.



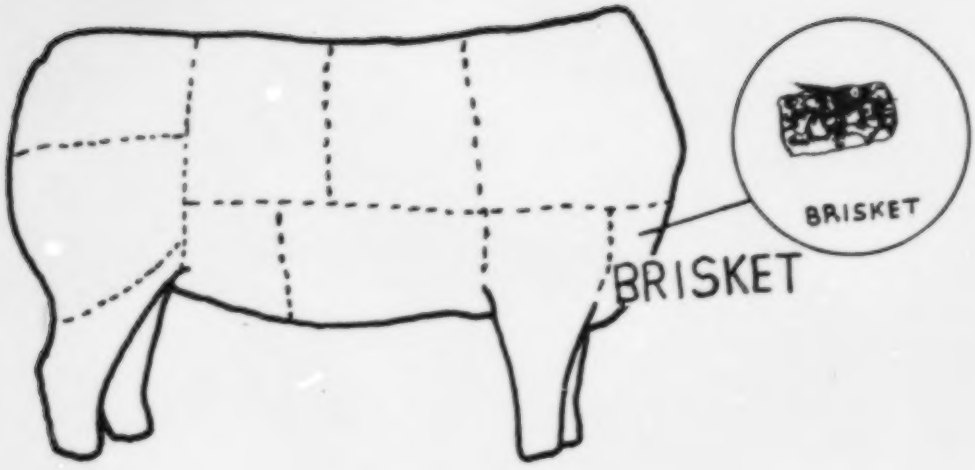
STEP 8 – The flank cut produces flank steak.



STEP 9 – The plate cut is divided into short ribs and plate cuts of meat.



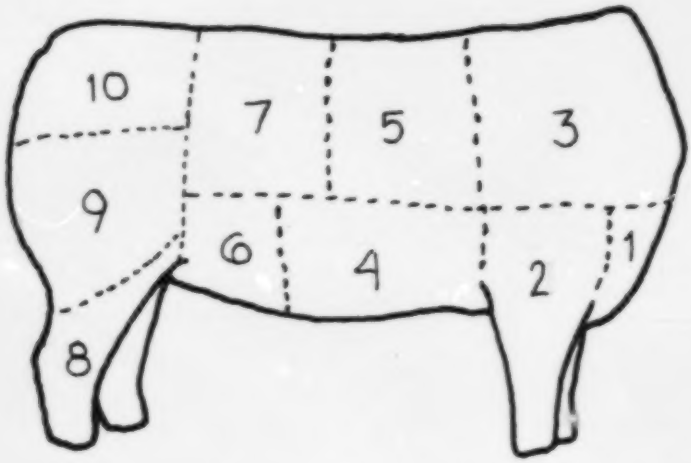
STEP 10 – The foreshank cut is butchered into arm roast.



STEP 11 – The brisket cut produces a meat of the same name – the beef brisket.

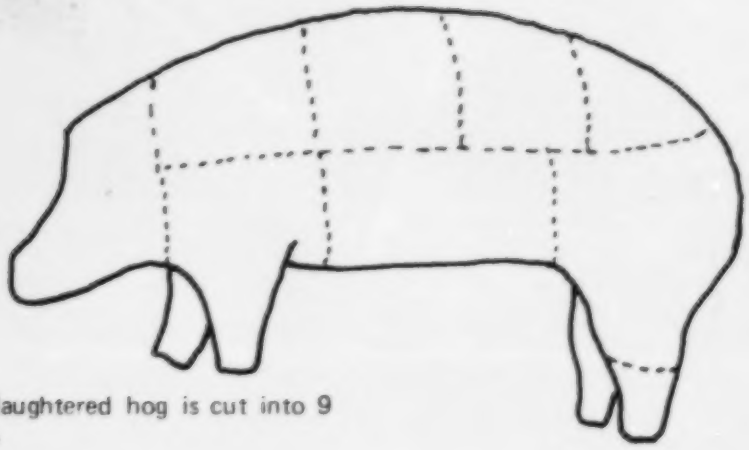
Check Point

Using the diagram provided and Check Sheet V, identify 10 wholesale cuts of beef.

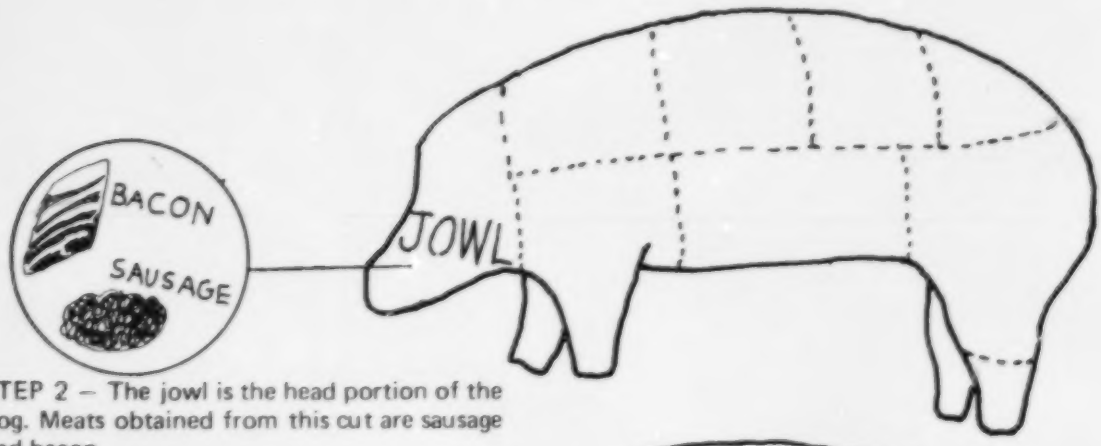


Instructional Objective VI

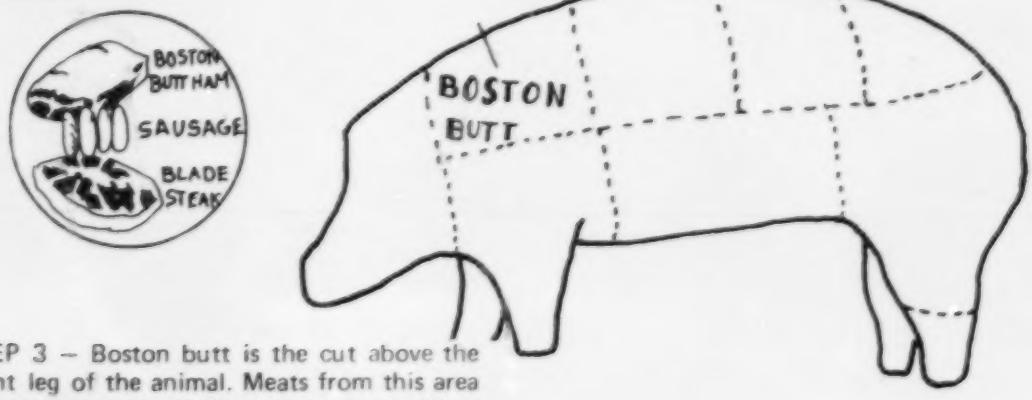
Given visual and written descriptions, each student will identify 9 wholesale cuts of pork.



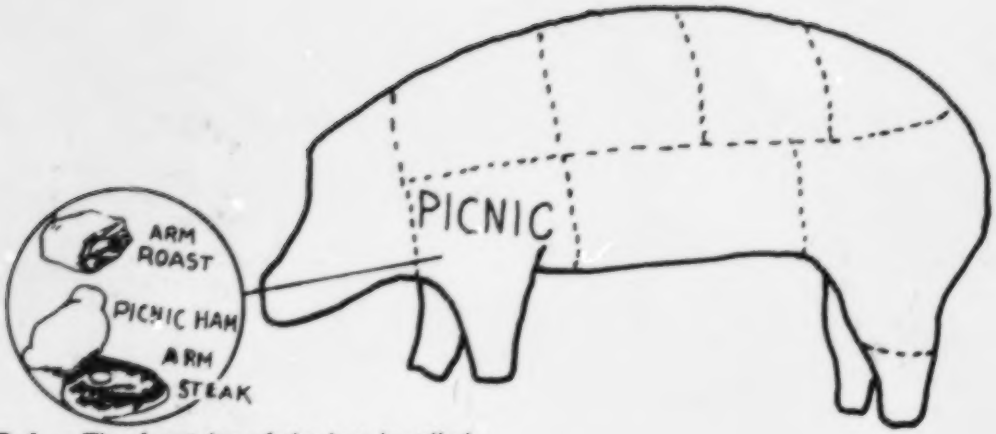
STEP 1 – A slaughtered hog is cut into 9 sections of meat.



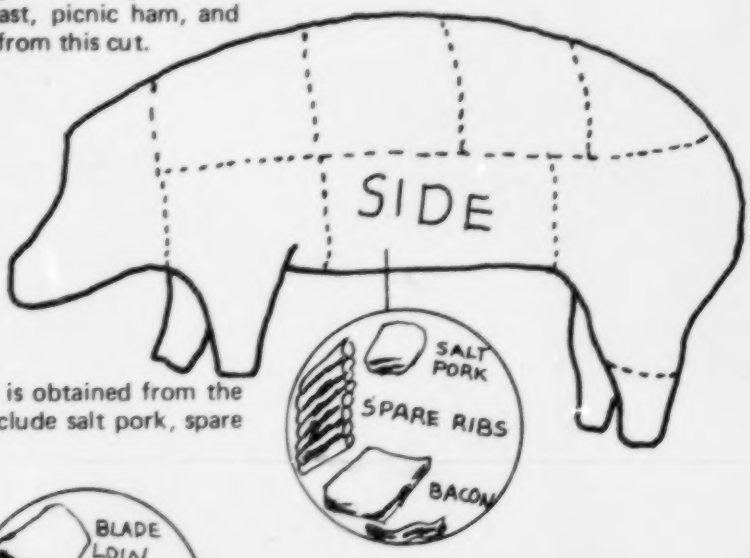
STEP 2 – The jowl is the head portion of the hog. Meats obtained from this cut are sausage and bacon.



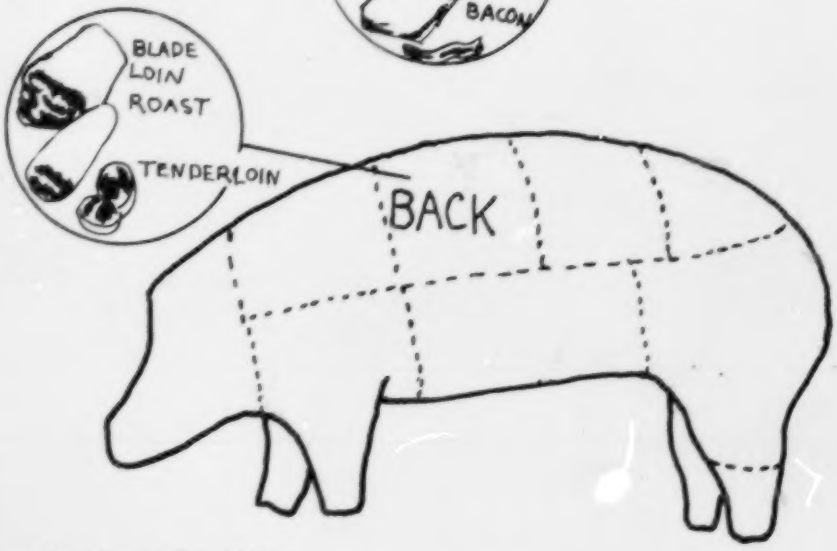
STEP 3 – Boston butt is the cut above the front leg of the animal. Meats from this area include boston butt, ham, sausage and blade steak.



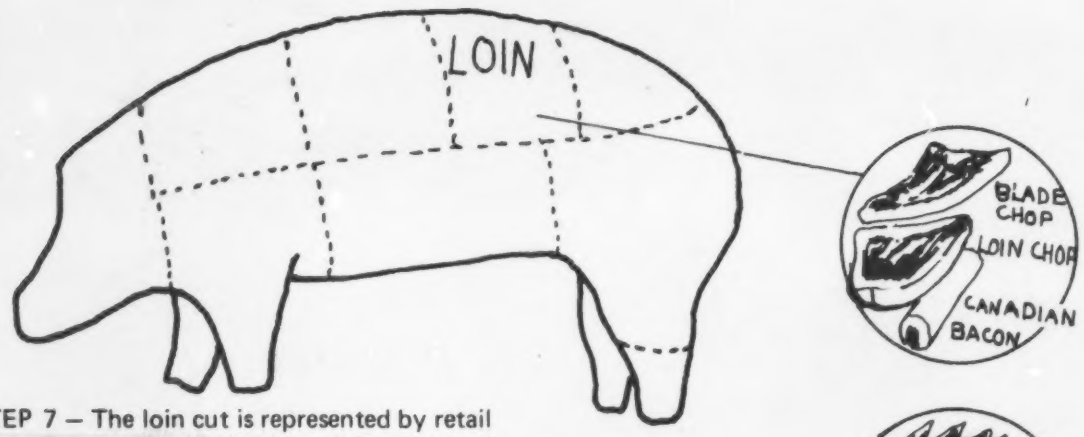
STEP 4 – The front leg of the hog is called the picnic cut. Arm roast, picnic ham, and arm steak are butchered from this cut.



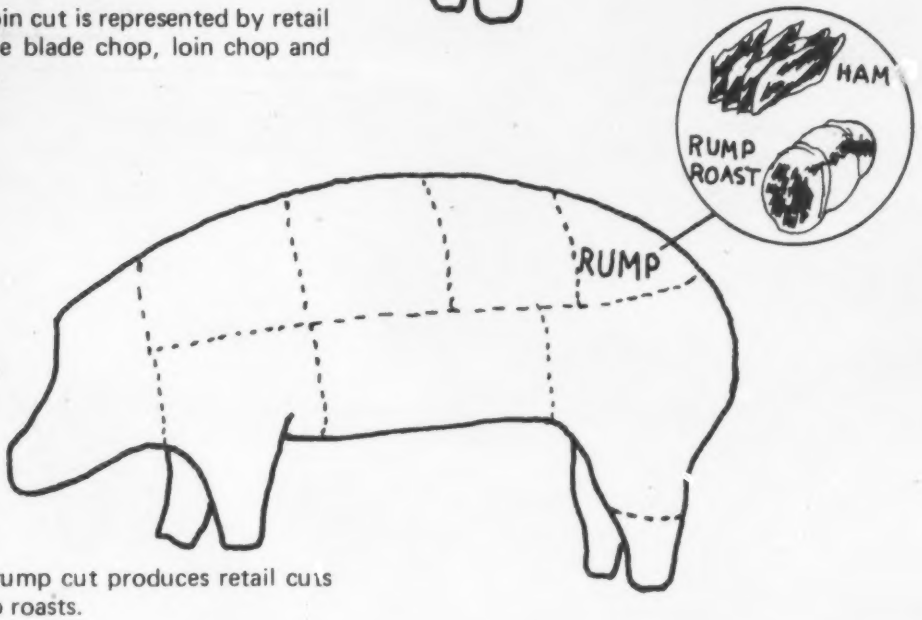
STEP 5 – This side cut is obtained from the belly of a hog. Meats include salt pork, spare ribs and bacon.



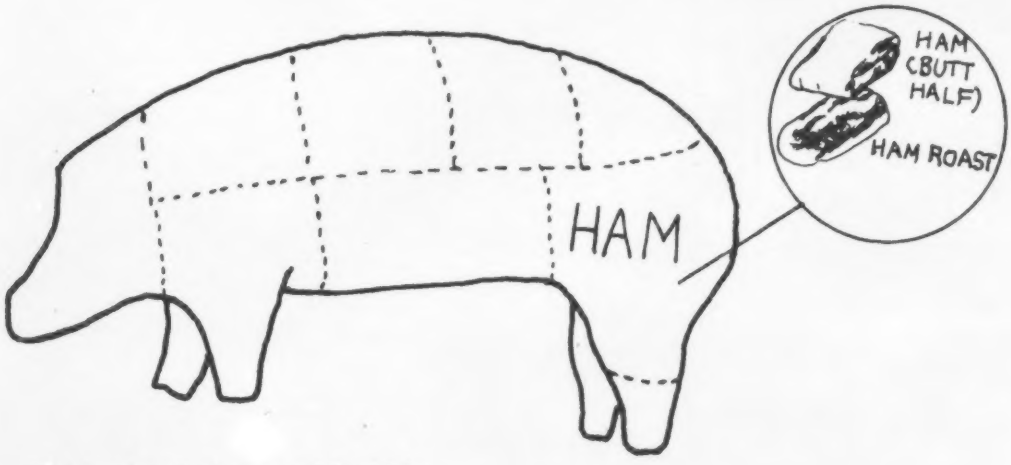
STEP 6 – The back cut is where some of the more expensive meats are found. Examples of these meats include blade loin roast and tenderloin.



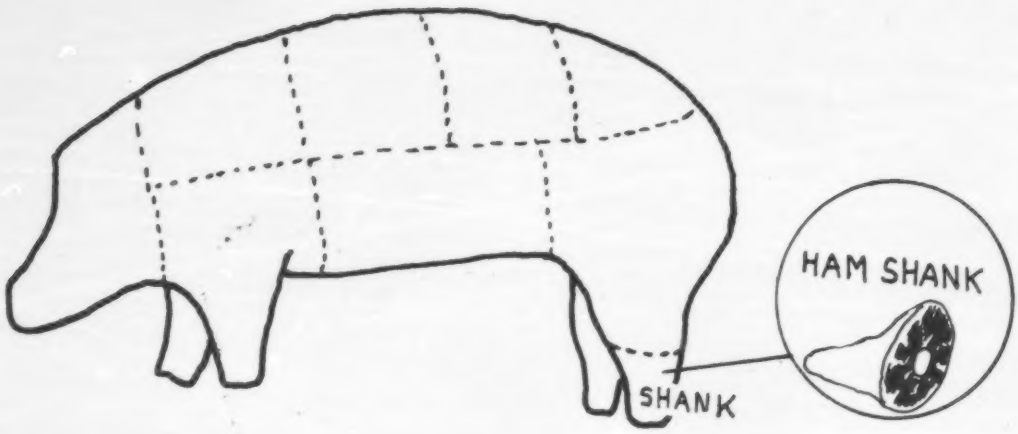
STEP 7 – The loin cut is represented by retail cuts of meat like blade chop, loin chop and Canadian bacon.



STEP 8 – The rump cut produces retail cuts as ham and rump roasts.



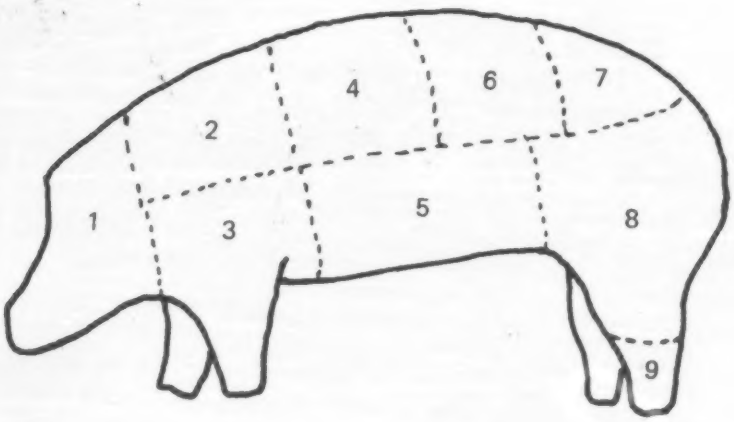
STEP 9 – The ham cut is the one with which most people are familiar. The meats produced are ham and ham roast.



STEP 10 – The shank cut is the lower portion of the leg and it produces ham shanks.

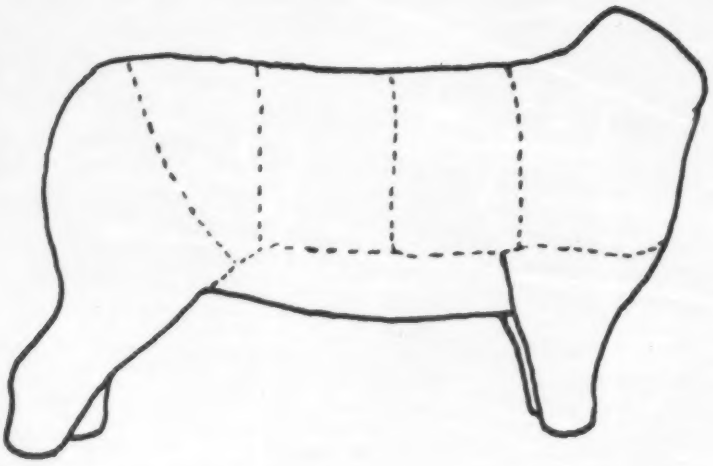
Check Point

Using the illustration provided identify the 9 wholesale cuts of pork.

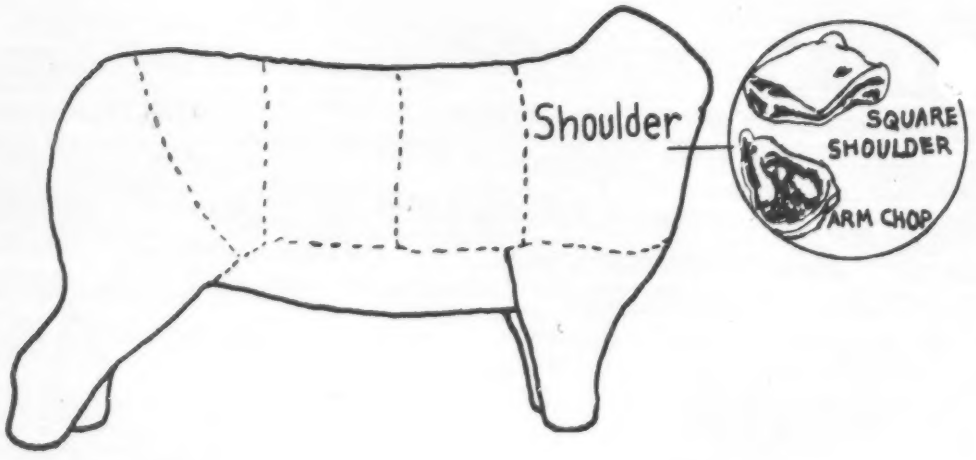


Instructional Objective VII

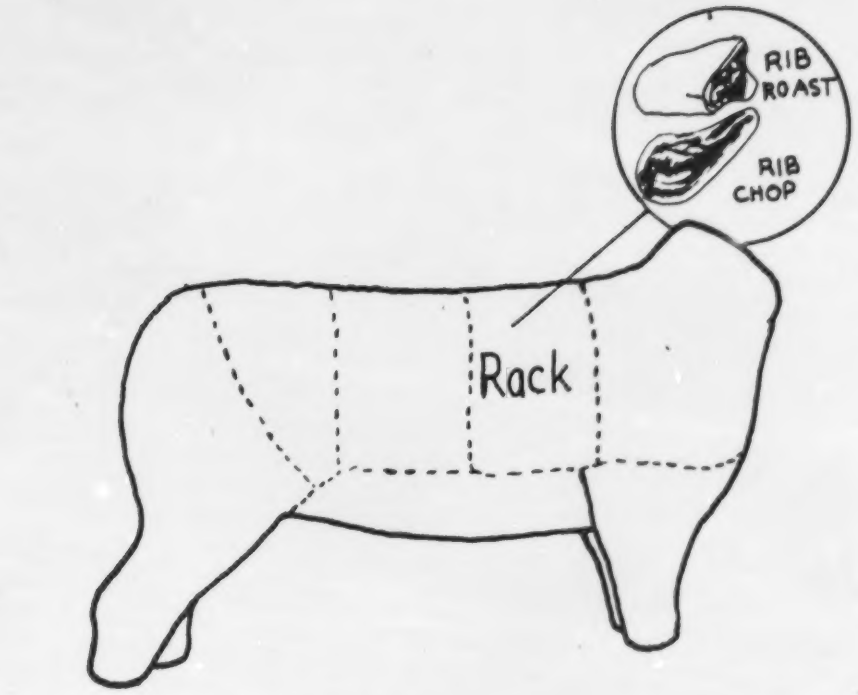
Given proper directions each student will identify the 7 wholesale cuts of a lamb.



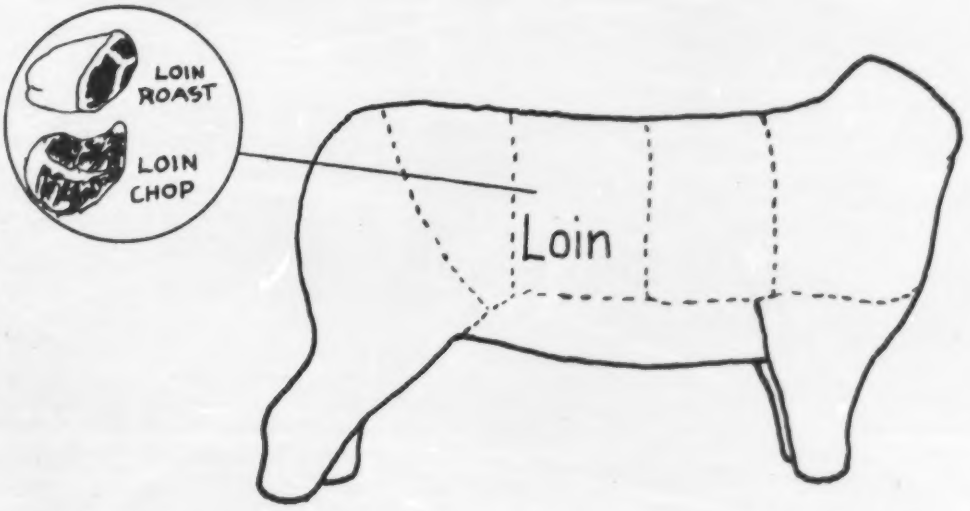
STEP 1 – A lamb is slaughtered into 7 wholesale cuts of meat.



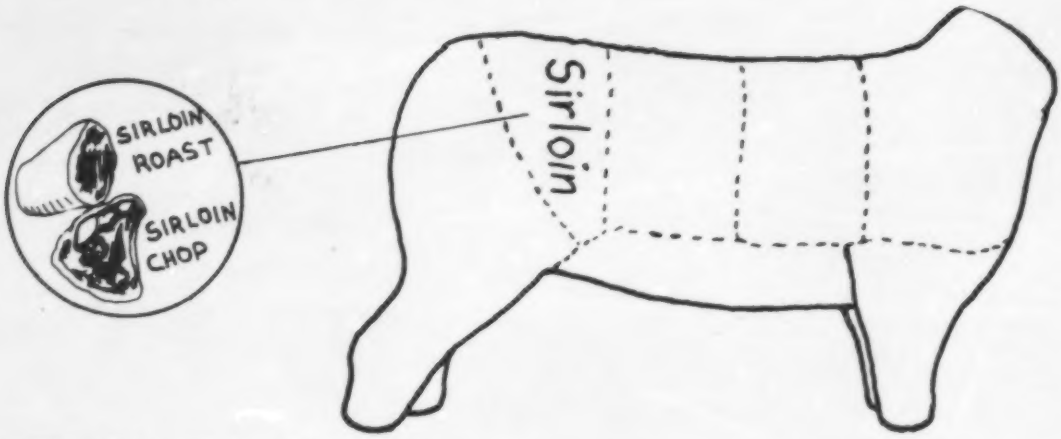
STEP 2 – The shoulder cut of meat produces square shoulder and arm chop retail meats.



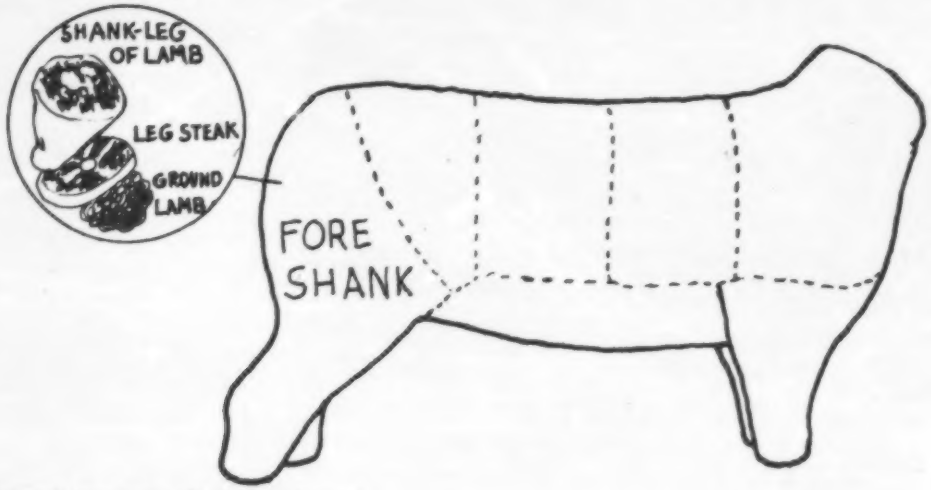
STEP 3 — The rack cut is located on the back of the lamb and its meats are rib roast and rib chops.



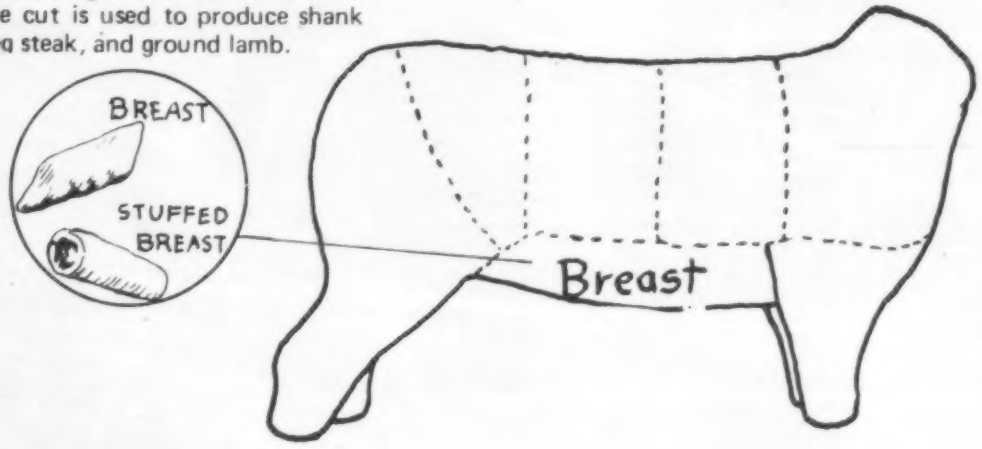
STEP 4 — Another part of the back section is the loin cut. Meats from this cut are loin chops and loin roast.



STEP 5 – The sirloin cut is located on the top rear of the lamb. Retail cuts of meat are sirloin chops and sirloin roasts.

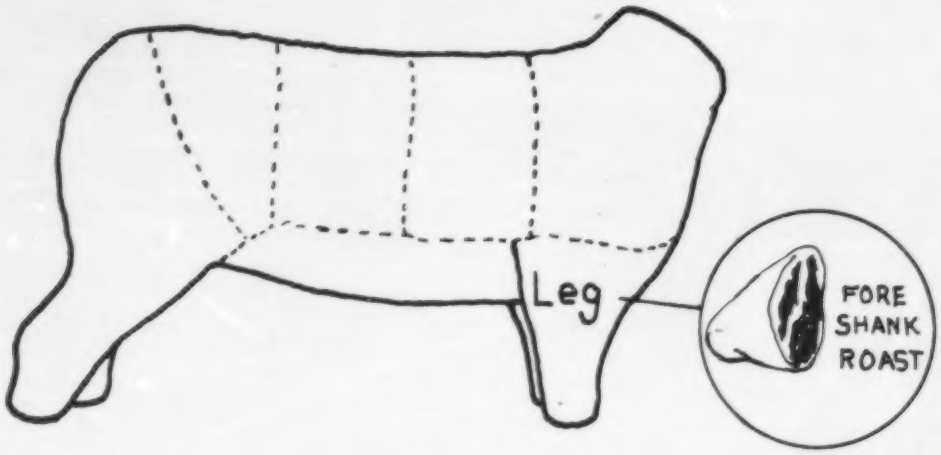


STEP 6 – The rear legs are called fore shanks. This wholesale cut is used to produce shank leg of lamb, leg steak, and ground lamb.



STEP 7 – The belly section of a lamb is called the breast cut. Retail meats from this area are breast and stuffed breast.

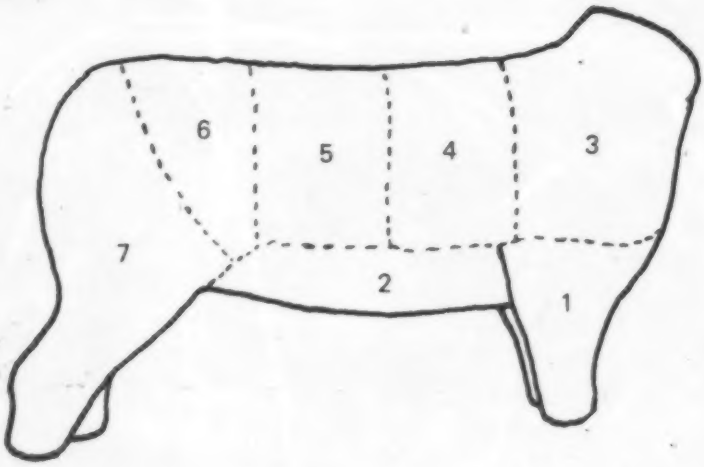
45



STEP 8 – The front legs are referred to as the leg cut. This wholesale cut is used to produce fore shank roasts.

Check Point

Using the illustration provided identify the 7 parts of a lamb on Check Sheet VII.

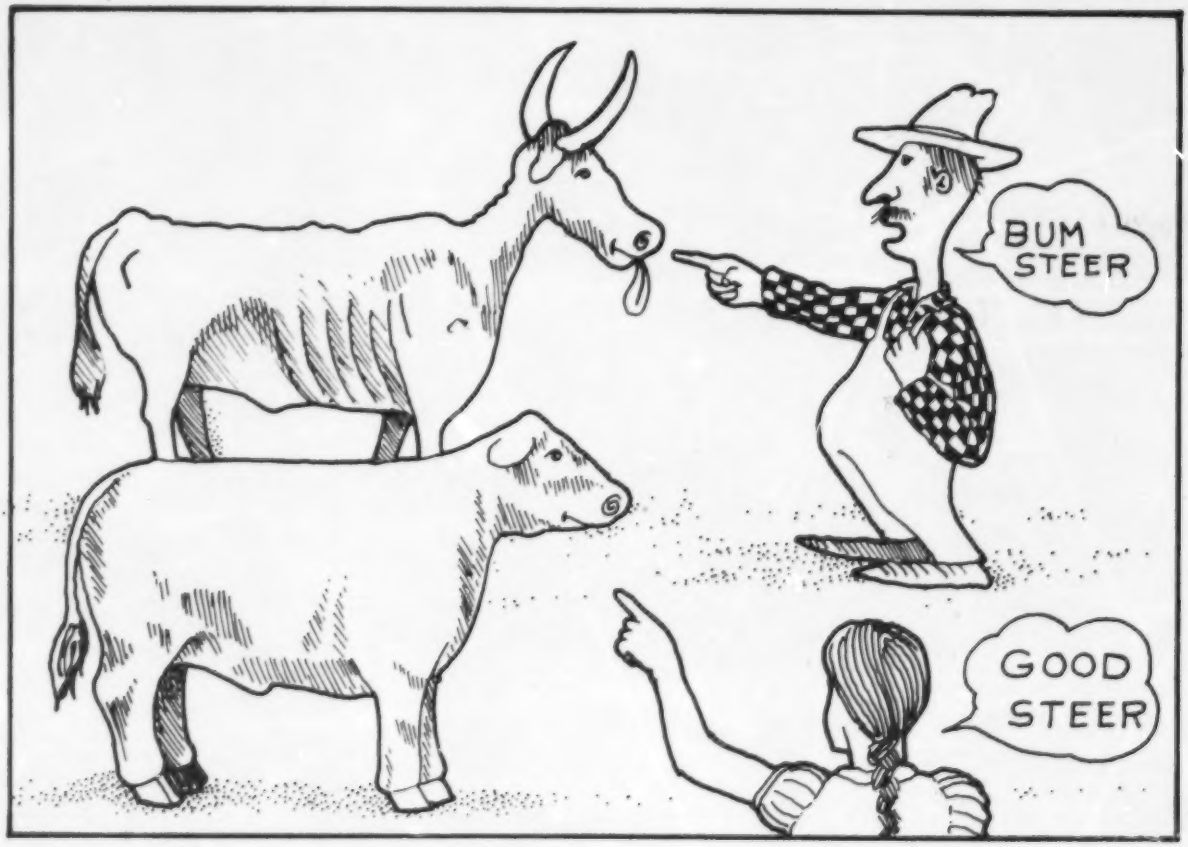


SECTION III – DESIRABLE CHARACTERISTICS OF BREEDING

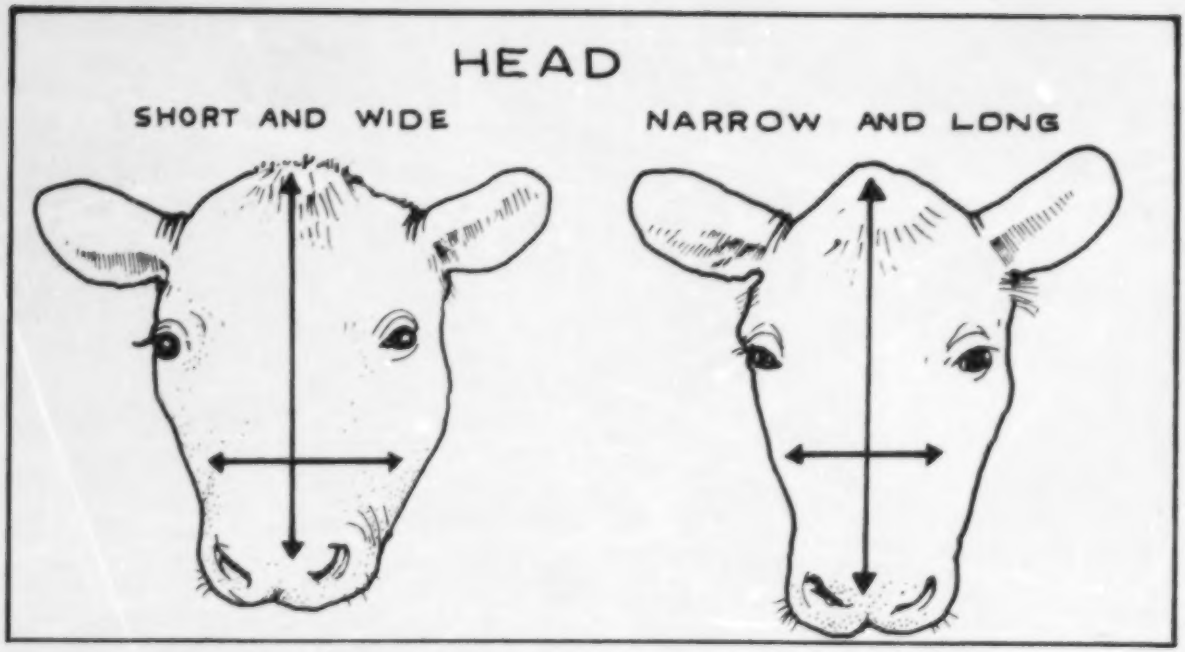
INTRODUCTION

This section identifies some desirable characteristics farmers or livestock managers look for when breeding animals. Wholesale and retail cuts of meat which appeal to shoppers generally come from animals that have been bred to produce a good quality of meat. This activity will depict some of the physical characteristics meat buyers look for in animals.

Instructional Objective VIII

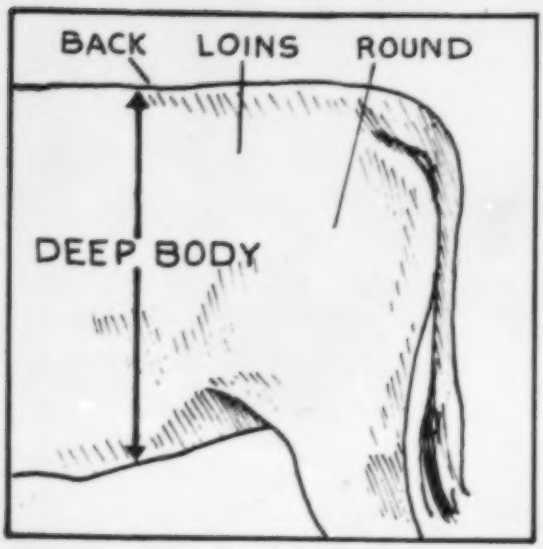


STEP 1 – Livestock farmers are able to identify important physical features of cattle.

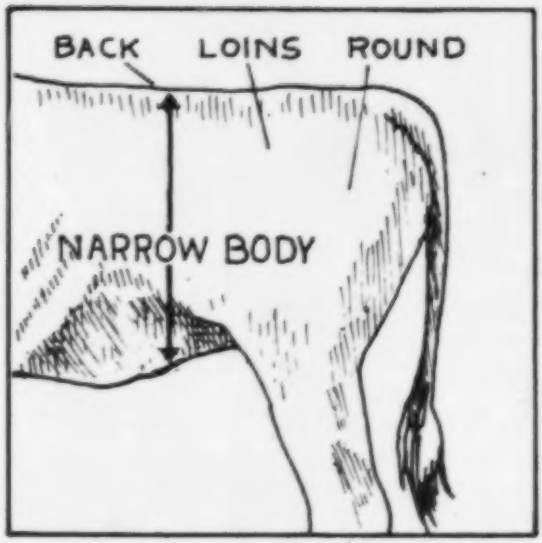


STEP 2 – A desirable steer will have a short wide head.

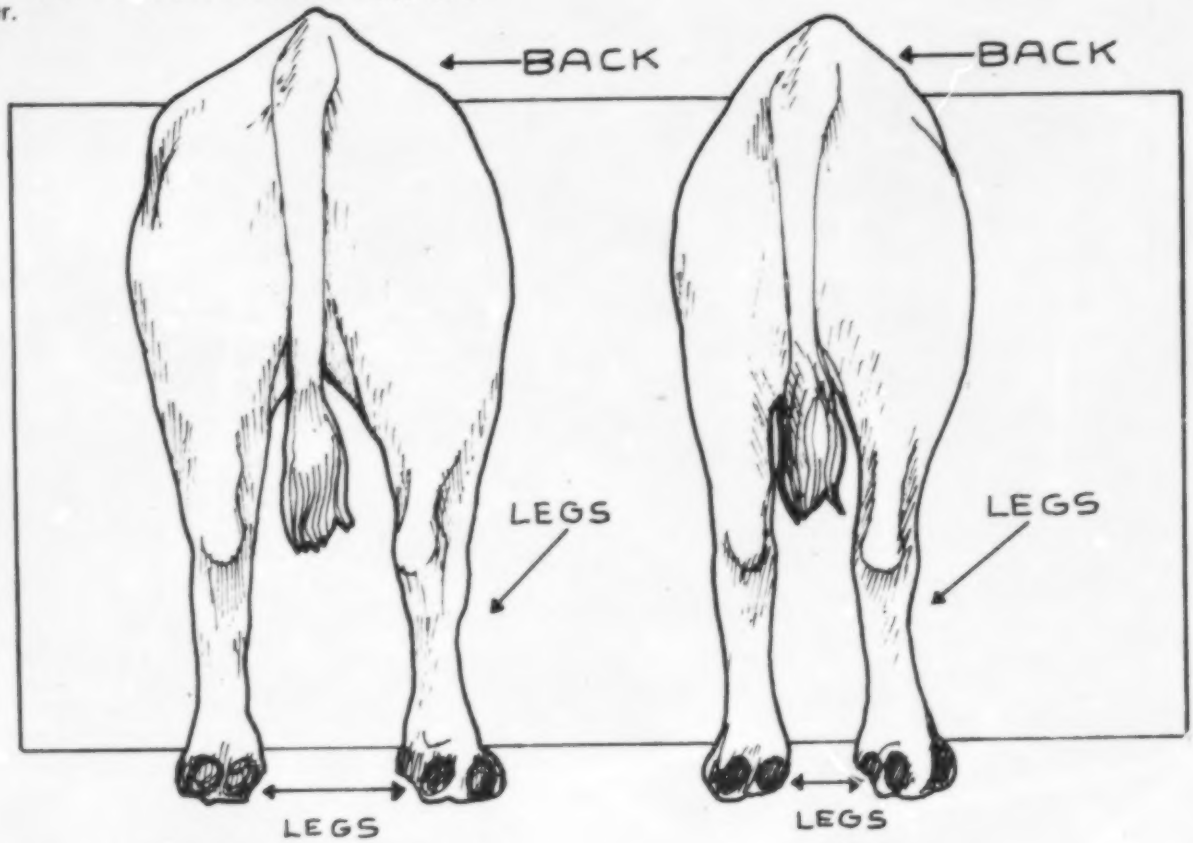
STEP 3 – While an undesirable animal will have a long and narrow head.



STEP 4 – The body of a steer can tell some desirable characteristics. In this example a deep body, straight back, thick loins and round are all desirable characteristics of a steer.



STEP 5 – While a narrow body, thin round and loins, and a curved back are all undesirable physical characteristics of a steer.



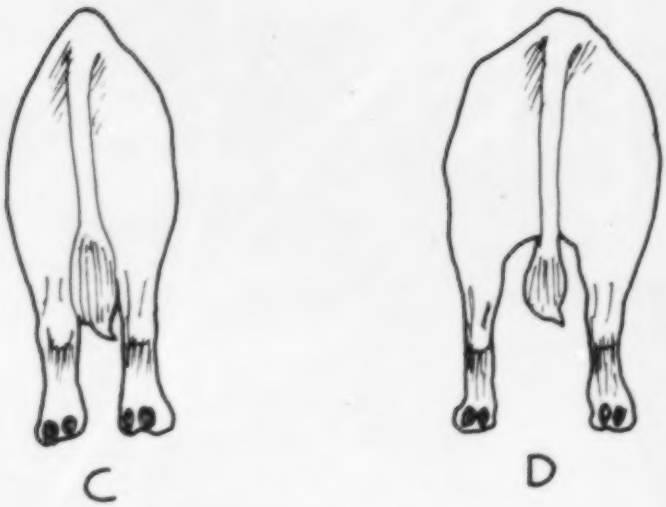
STEP 6 – The rear of a steer is also a good reference in determining desirable traits. As illustrated above a well-rounded back, short straight legs and legs set wide apart are all good characteristics of a beef animal.

STEP 7 – While a thin-shaped back, long crooked legs and legs too close together are all undesirable characteristics of a beef steer.

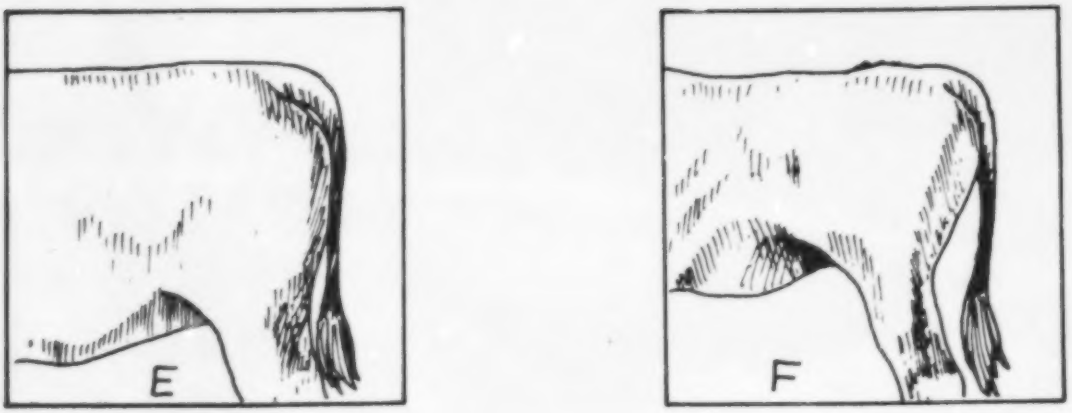
Check Point

Using Check Sheet VIII identify the desirable and undesirable characteristics provided.

A B



C D



E F

SECTION IV – BREEDING

INTRODUCTION

Farmers use different methods of reproduction; examples are the natural or artificial methods of impregnating animals. Various systems of breeding are used with these methods to enhance (make better) physical characteristics of animals.

Instructional Objective IX

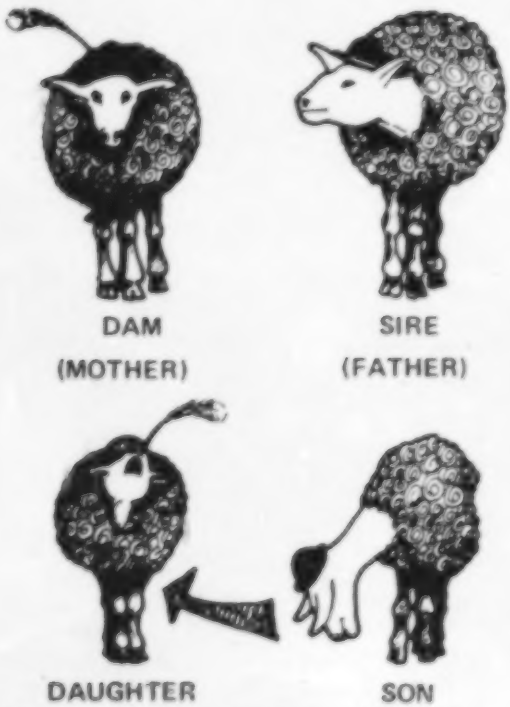
Given the proper information, each student will diagram the inbreedings of animals.

STEP 1 – There are many systems of natural and artificial breeding. Some examples of these are inbreeding, linebreeding, outcrossing, crossbreeding and upgrading.

STEP 2 – Observe this family of animals.

51 STEP 3 – The inbreeding system involves the mating of father (sire) to daughter,

STEP 4 – son to mother (dam),



STEP 5 – and brother to sister. Using this system of breeding, a farmer tries to unite the desirable characteristics of each animal to produce an improved offspring.

Check Point

Using the information below and Check Sheet IX, identify all the examples of inbreeding.

King William was bred to Queen Martha and over the years they produced Princess Cindy, Prince Sammie, Prince John, Princess Debra, Prince Marvin, and Princess Donna.

410.131-014 SUPERVISOR, ARTIFICIAL BREEDING RANCH (agric.)

Supervises and coordinates activities of workers engaged in caring for stud animals and collecting semen: Studies weight and activity records, nutritional requirements, and considers available feed, to determine feed rations. Considers animal's age, temperaments, fertility, and buyer demand to develop semen collection schedules. Observes animals for deviation in behavior and appearance, to detect illness and injury. Treats, or assigns workers to treat, ill or injured animals, or obtains services of VETERINARIAN (medical ser.), for serious illnesses or injuries. Assigns workers tasks, such as feeding animals, cleaning quarters and maintaining facilities and equipment. Supervises workers engaged in collecting and processing semen and collects semen using artificial vagina. Analyzes semen samples using spectroscope and microscope to determine number of services possible, or supervises workers analyzing semen samples. Demonstrates artificial insemination techniques to farmers to promote use of product. Trains workers in care of studs, and collecting and processing semen. Orders supplies, such as feed and bedding. Performs other duties as described under SUPERVISOR (any ind.).

410.674-018 LIVESTOCK-YARD ATTENDANT (any ind.)

Performs any combination of the following tasks to bed, feed, water, load, weigh, mark, and segregate livestock: Feeds grains, hay, and prepared feed and waters livestock according to schedule. Opens gates and drives livestock to scales, pens, trucks, railcars, and holding and slaughtering areas according to instructions, using electric prod and whip. Weighs animals and records weight. Segregates animals according to weight, age, color, and physical condition. Marks livestock to identify ownership and grade, using brands, tags, paint, or tattoos. Cleans ramps, scales, trucks, railcars, and pens, using hose, fork, shovel, and rake. Scatters new bedding material, such as sawdust and straw, in pens, railcars, and trucks. May vaccinate, apply liniment, drench, isolate, and mark animals to effect disease control program. May make routine repairs and perform general maintenance duties in stockyard.

410.684-010 FARMWORKER, DAIRY (agric.) laborer, dairy farm.

Performs any combination of the following tasks on a dairy farm: Washes and sprays cows with water, insecticides and repellants. Flushes, brushes, and scrapes refuse from walls and floors to minimize infestation. Examines cows and reports estrus, injuries, and disease to supervisor. Administers prescribed treatments and reports problems requiring veterinary attention to supervisor. Weighs, loads, mixes, and distributes feed. Replaces bedding in stalls. Herds cows from milking parlor to pasture. Loads animals to be sold onto trucks. Cleans and sterilizes milk containers and equipment and tends pumps that automatically clean milk pipelines. Milks cows by hand and using milking machine. Cultivates, harvests, and stores feed crops, using farm equipment, such as trucks and tractors. May build and maintain fences and farm facilities. May repair and lubricate equipment and machinery. May maintain data, such as breeding and cost records.

410.684-014 SHEEP SHEARER (agric.) sheep clipper; stock clipper; wool shearer.

Shears wool from live sheep, using power-driven clippers or hand shears: Places animal in shearing station. Clips wool close to hide so that fleece is removed in one piece and exercises care to nick or cut skin as little as possible. Herds shorn animal into runway leading to pen. Oils and sharpens clippers and shears. May tie fleece.

410.685-010 MILKER, MACHINE (agric.) milking-machine operator.

Tends machine that milks dairy cows: Guides cow into stanchion and washes teats and udder of cow with disinfectant. Squeezes cow's teat to collect sample of milk in strainer cup and examines sample for curd and blood. Starts milking machine and attaches cups of machine to teats of cow. Removes cups when required amount of milk is obtained from cow. Dips cups of machine into disinfectant solution after each cow is milked. Pumps milk from receptacles into storage tank and cleans and sterilizes equipment.

410.131-022 SUPERVISOR, STOCK RANCH (agric.)

Supervises and coordinates activities of workers engaged in breeding, feeding, herding, marking, and segregating livestock and in construction and repair of fences, pens, and buildings: Inspects stock, buildings, fences, fields, pasturage and feed supply, notes tasks to be done, and assigns them to crews or individual workers. Performs other duties as described under SUPERVISOR (any ind.). May be designated according to type of stock raised.

410.134-010 SUPERVISOR, LIVESTOCK-YARD (any ind.)

Supervises and coordinates activities of workers engaged in care and movement of livestock in livestock yard: Assigns workers to feed, weigh, medically treat, and transfer livestock. Observes livestock handling and issues movement and health treatment instructions to direct livestock processing and transfer. Examines livestock to determine effectiveness of disease and injury control and instructs workers to take corrective action to rectify deficiencies. Observes condition of stockyard structures and equipment and arranges for needed maintenance and repairs. Performs other duties as described under SUPERVISOR (any ind.).

410.161-010 ANIMAL BREEDER (agric.)

Breeds and raises animals, such as cats, dogs, guinea pigs, mice, monkeys, rabbits, and rats: Selects and breeds animals, according to knowledge of animals, genealogy, traits, and offspring desired. Feeds and waters animals, and cleans pens, cages, yards, and hutches. Examines animals to detect symptoms of illness or injury. Treats minor injuries and ailments and engages VETERINARIAN (medical ser.) to treat animals with serious illnesses or injuries. Records weight, diet and other breeding data. Builds and maintains hutches, pens, and fenced yards. Adjusts controls to maintain specific temperature in building. Arranges for sale of animals to hospitals, research centers, pet shops, and food processing plants. May exhibit animals at shows. May be designated according to kind of animal bred and raised as CAT BREEDER (agric.); DOG BREEDER (agric.); GUINEA-PIG BREEDER (agric.); MONKEY BREEDER (agric.); MOUSE BREEDER (agric.); RABBIT BREEDER (agric.); RAT BREEDER (agric.).

410.161-018 LIVESTOCK RANCHER (agric.) livestock breeder; livestock farmer.

Breeds and raises livestock, such as beef cattle, dairy cattle, goats, horses, reindeer, sheep, and swine, for such purposes as sale of meat, riding or working stock, breeding, or for show; and for products such as milk, wool, and hair: Selects and breeds animals according to knowledge of animals, genealogy, characteristics, and offspring desired. Selects pasture, range, and crop lands to graze animals and produce feed crops. Mixes feed and feed supplements according to dietary requirements of animals and availability of grazing land. Feeds, waters, lays out salt licks for, and grazes animals. Observes animals to detect signs of illness and injury, treats minor injuries and ailments, disinfects and vaccinates animals, and engages VETERINARIAN (medical ser.) to treat serious illnesses and injuries. Attends animals during and after birth of offspring. Castrates, docks, and dehorns animals. Brands, tattoos, notches ears, and attaches tags to identify animals. Milks cows and goats, shears sheep, and clips goats' hair. Operates farm machinery to plant, cultivate, and harvest feed crops. Cleans and fumigates barns, stalls, and pens and sterilizes milking machines and equipment. Cools milk to prevent spoilage and packages wool and other products for shipment. Maintains and repairs farm machinery, equipment, buildings, pens, and fences. Arranges for sale of animals and products. Maintains cost and operation records. May butcher animals and cure meat. May hire and supervise workers. May exercise and train horses. May groom and exhibit animals at livestock shows. May be designated according to animal raised as CATTLE RANCHER (agric.); DAIRY FARMER (agric); GOAT FARMER (agric.); HORSE RANCHER (agric.); REINDEER RANCHER (agric.); SHEEP RANCHER (agric.); SWINE RANCHER (agric.).

410.664-010 FARMWORKER, LIVESTOCK (agric.) laborer, livestock; ranch hand, livestock.

Performs any combination of the following tasks to attend livestock, such as cattle, sheep, swine, and goats on a farm or ranch: Mixes feed and additives, fills feed troughs with feed, and waters livestock. Herds livestock to pasture for grazing. Examines animals to detect diseases and injuries. Vaccinates animals by placing vaccine in drinking water or feed, or using syringes and

hypodermic needles. Applies medications to cuts and bruises, sprays livestock with insecticide, and herds them into insecticide bath. Confines livestock in stalls, washes and clips them to prepare them for calving, and assists VETERINARIAN (medical ser.) in delivery of offspring. Binds or clamps testes or surgically removes testes to castrate livestock. Clips identifying notches or symbols on animal or brands animal, using branding iron, to indicate ownership. Clamps metal rings into nostrils of livestock to permit easier handling and prevent rooting. Docks lambs, using hand snips. Cleans livestock stalls and sheds, using disinfectant solutions, brushes, and shovels. Grooms, clips, and trims animals for exhibition. May maintain ranch buildings and equipment. May plant, cultivate, and harvest feed grain for stock. May maintain breeding, feeding, and cost records. May shear sheep.